Air Live®
Powered by OvisLink Corp.

WP-201G v2

802.11g Wireless USB
Print Server

User's Manual

www.airlive.com

Declaration of Conformity

We, Manufacturer/Importer

OvisLink Corp.
5F., NO.6, Lane 130, Min-Chuan Rd.,
Hsin-Tien City, Taipei County, Taiwan

Declare that the product

802.11g Wireless USB2.0 Print Server
AirLive WP-201G v2

is in conformity with

In accordance with 2004/108/EC Directive and 1999/5 EC-R & TTE Directive

Clause	Description
■ **EN 300 328 v1.7.1 (2006-05)**	Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission equipment operating in the 2.4GHz ISM band And using spread spectrum modulation techniques; Part 1：technical Characteristics and test conditions Part2：Harmonized EN covering Essential requirements under article 3.2 of the R&TTE Directive
■ **EN 301 489-1 V1.6.1 (2005-09)** ■ **EN 301 489-17 V1.2.1 (2002-08)**	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic compatibility(EMC) standard for radio equipment and Services; Part 17：Specific conditions for wideband data and HIPERLAN equipment
■ **EN 50371:2002**	Generic standard to demonstrate the compliance of low power Electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic field (10MHz – 300GHz) -General public
■ **EN 60950-1:2001+A11 :2004**	Safety for information technology equipment including electrical business equipment
■ **CE marking**	CE

Manufacturer/Importer

Signature : Albert Yeh

Name : **Albert Yeh**

Position/ Title： **Vice President** (Stamp) Date： **2008/5/5**

AirLive WP-201G v2 CE Declaration Statement

Country	Declaration	Country	Declaration
cs Česky [Czech]	OvisLink Corp. tímto prohlašuje, že tento AirLive WP-201G v2 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.	**lt** Lietuvių [Lithuanian]	Šiuo OvisLink Corp. deklaruoja, kad šis AirLive WP-201G v2 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
da Dansk [Danish]	Undertegnede OvisLink Corp. erklærer herved, at følgende udstyr AirLive WP-201G v2 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.	**nl** Nederlands [Dutch	Hierbij verklaart OvisLink Corp. dat het toestel AirLive WP-201G v2 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
de Deutsch [German]	Hiermit erklärt OvisLink Corp., dass sich das Gerät AirLive WP-201G v2 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.	**mt** Malti [Maltese]	Hawnhekk, OvisLink Corp, jiddikjara li dan AirLive WP-201G v2 jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
et Eesti [Estonian]	Käesolevaga kinnitab OvisLink Corp. seadme AirLive WP-201G v2 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.	**hu** Magyar [Hungarian]	Az OvisLink Corporation kijelenti, hogy az AirLive WP-201G v2 megfelel az 1999/05/CE irányelv alapvető követelményeinek és egyéb vonatkozó rendelkezéseinek.
en English	Hereby, OvisLink Corp., declares that this AirLive WP-201G v2 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	**pl** Polski [Polish]	Niniejszym OvisLink Corp oświadcza, że AirLive WP-201G v2 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
es Español [Spanish]	Por medio de la presente OvisLink Corp. declara que el AirLive WP-201G v2 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.	**pt** Português [Portuguese]	OvisLink Corp declara que este AirLive WP-201G v2 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ OvisLink Corp. ΔΗΛΩΝΕΙ ΟΤΙ AirLive WP-201G v2 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.	**sl** Slovensko [Slovenian]	OvisLink Corp izjavlja, da je ta AirLive WP-201G v2 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
fr Français [French]	Par la présente OvisLink Corp. déclare que l'appareil AirLive WP-201G v2 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE	**sk** Slovensky [Slovak]	OvisLink Corp týmto vyhlasuje, že AirLive WP-201G v2 spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
it Italiano [Italian]	Con la presente OvisLink Corp. dichiara che questo AirLive WP-201G v2 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.	**fi** Suomi [Finnish]	OvisLink Corp vakuuttaa täten että AirLive WP-201G v2 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen
lv Latviski [Latvian]	Ar šo OvisLink Corp. deklarē, ka AirLive WP-201G v2 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.	Íslenska [Icelandic]	Hér með lýsir OvisLink Corp yfir því að AirLive WP-201G v2 er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
sv Svenska [Swedish]	Härmed intygar OvisLink Corp. att denna AirLive WP-201G v2 står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.	**no** Norsk [Norwegian]	OvisLink Corp erklærer herved at utstyret AirLive WP-201G v2 er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

A copy of the full CE report can be obtained from the following address:

OvisLink Corp.
5F, No.6 Lane 130,
Min-Chuan Rd, Hsin-Tien City,
Taipei, Taiwan, R.O.C.

This equipment may be used in AT, BE, CY, CZ, DK, EE, FI, FR, DE, GR, HU, IE, IT, LV, LT, LU, MT, NL, PL, PT, SK, SI, ES, SE, GB, IS, LI, NO, CH, BG, RO, TR

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio technician for help.

FCC Caution

This device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of March 9, 1999 on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity (R&TTE)
The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacturer must therefore be allowed at all times to ensure the safe use of the equipment.

EU Countries Intended for Use

The ETSI version of this device is intended for home and office use in Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.
The ETSI version of this device is also authorized for use in EFTA member states: Iceland, Liechtenstein, Norway, and Switzerland.

COPYRIGHT

Copyright ©2007 by OvisLink Corp. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of this company

OvisLink Corp. makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Any software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Further, this company reserves the right to revise this publication and to make changes from time to time in the contents thereof without obligation to notify any person of such revision or changes.

Table of Contents

Chapter 1: Introduction 1

1.1 Product Introduction 1
1.2 Product Package 1
1.3 Networking Printing Architecture 1
1.3.1 Print Server Network Functions 2
1.3.2 Networking Printing Functions for Clients 3
1.3.3 Network Printing Functions for Network Server 5
1.4 Network Printing Environment 5
1.5 Firmware & Printing Function 7

Chapter 2: Hardware Installation 8

Chapter 3: Windows Peer-to-Peer Network 9

3.1 System Architecture 9
3.2 Installation and Setup 10
3.3 Print Server Utilities 16
3.3.1 Network Ports Quick Setup 17
3.3.2 Remote Ports (Utility) 18
3.4 Windows Add Printer Procedure 20
3.4.1 Windows Vista 20
3.4.2 Windows XP 23

Chapter 4: Windows NT/2000/2003 Network 27

4.1 System Architecture 27
4.2 Windows NT/2000/2003 Server Installation and Setup 27
4.3 User Installation and Setup 29

Chapter 5: NetWare Network 30

5.1 System Architecture 30
5.2 NetWare 3.x/4.x/5.x Installation & Setup 31
5.2.1 Installation Using PCONSOLE 31
5.2.1.1 Configuring as Print Server Mode 31

Chapter 6: UNIX System Network 33

6.1 Introduction 33
6.2 Enable Print Server's TCP/IP Support 33
6.3 Setup Print Server's IP Address 33
6.3.1 DHCP 34
6.3.2 BOOTP 34

6.4 Verify Print Server's IP Address 35
6.5 Configure Remote LPD Printing on the Host 35
Chapter 7: Configuration Utility 37
7.1 Introduction 37
7.2 Search for All Available Print Server 38
7.3 Status of Print Server 39
7.4 Setup of the Print Server 40
7.5 General Configuration 41
7.6 TCP/IP Configuration 41
7.7 Netware Print Server Configuration 43
7.8 AppleTalk Configuration 44
7.9 Bonjour Configuration 45
7.10 SNMP Configuration 45
7.11 SMB Configuration 46
7.12 System Configuration 46
7.13 Wireless Configuration 47
7.14 Wizard 53
7.15 Report 56
Chapter 8: Web Management 57
8.1 Introduction 57
8.2 Login 57
8.3 Device Status 58
8.3.1 System 58
8.3.2 Printer 58
8.3.3 TCP/IP 59
8.3.4 SMB 59
8.3.5 SNMP 59
8.3.6 NetWare 60
8.3.7 AppleTalk 60
8.3.8 Bonjour 61
8.4 Setup Wizard 61
8.4.1 System 61
8.4.1.1 Admin Password 62
8.4.1.2 Advanced Settings 62
8.4.2 Wireless 63
8.4.2.1 Site Survey 64
8.4.2.2 Encryption 64
8.4.3 TCP/IP 67
8.4.4 SMB 68

8.4.5 SNMP 68
8.4.6 NetWare 68
8.4.7 AppleTalk 70
8.4.8 Bonjour 70
8.4.9 Save Settings 71
8.5 System Tools 71
8.5.1 Load Default 71
8.5.2 Upgrade Firmware from Browser 71
8.5.3 Backup Setting 72
8.5.4 Restore System 72
Chapter 9: TELNET Management 73
9.1 Introduction 73
9.2 Login 73
9.3 Get Settings Values – “get” Command 73
9.4 Modify Settings Values – “set” Command 77
9.5 Other Commands 81
9.5.1 ipconfig 81
9.5.2 reboot 81
9.5.3 exit 81
9.5.4 help 81
Chapter 10: IPP Printing 82
10.1 Introduction 82
10.2 System Setup 82
10.2.1 Print Server Side 82
10.2.2 Client Side 82
Chapter 11: Windows XP SP2 Setup 86

Chapter 1: Introduction

1.1 Product Introduction

Thank you for purchasing the AirLive WP-201G v2 Wireless Print Server. The print server will allow your printer to become a shared device on the network. It offers printing flexibility and manageability on your Local Area Network at low costs and offers minimum setup and maintenance.

This print server supports IPX/SPX, NetBETI, TCP/IP and AppleTalk protocols. It is the best network printing solution for various common network operating systems such as Windows 98SE/Me/NT/2000/XP/2003/Vista, NetWare, Unix/Linux and MAC OS, etc.

With the help of Installation Wizard, you can easily and instantly complete the settings for the printing environment, and start enjoying the fantastic features provided by the print server.

In the following chapters, we will introduce in detail the printing features, installation methods, and system configuration for different network environments.

If you would like to set up and install this print server quickly, please refer to the Quick Installation Guide.

1.2 Product Package

This package contains the following components:

- One Print Server
- One Antenna
- One Power Adapter
- One Quick Installation Guide
- One CD-ROM (Including all the software utilities, driver's and user's manual)

1.3 Network Printing Architecture

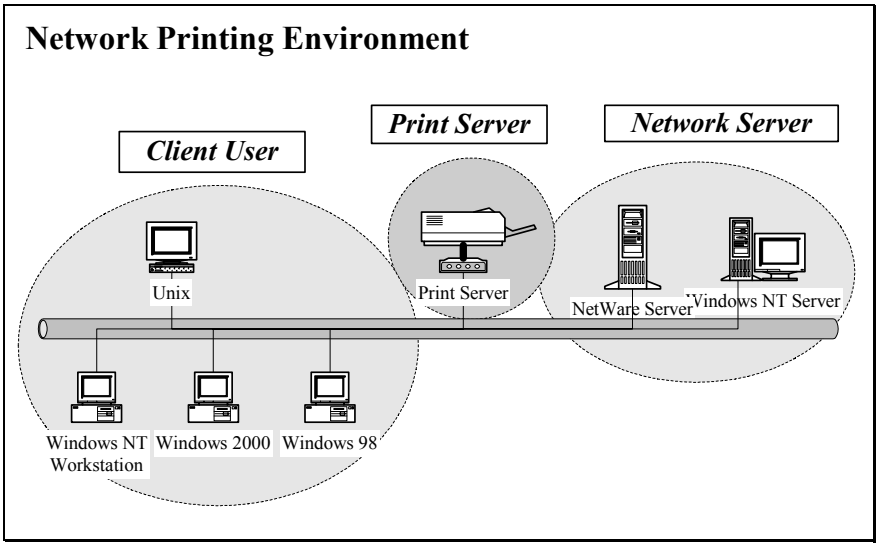
This section illustrates how print server operates on the network. Before you install and use the print server, it is strongly recommended that you read this section completely, and select only the chapters you need according to your network operating system by "Contents of the User's Manual" in the next section.

This section will first introduce the role every component plays in the network-printing environment.

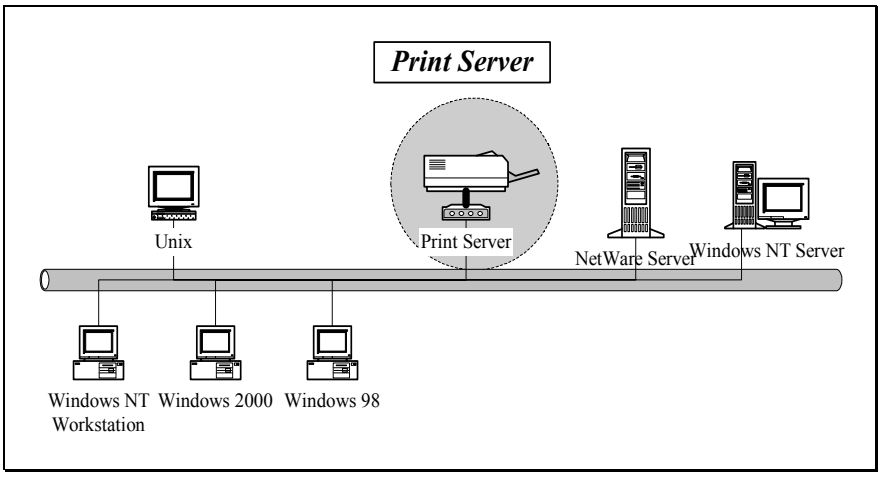
Print Server

Client User

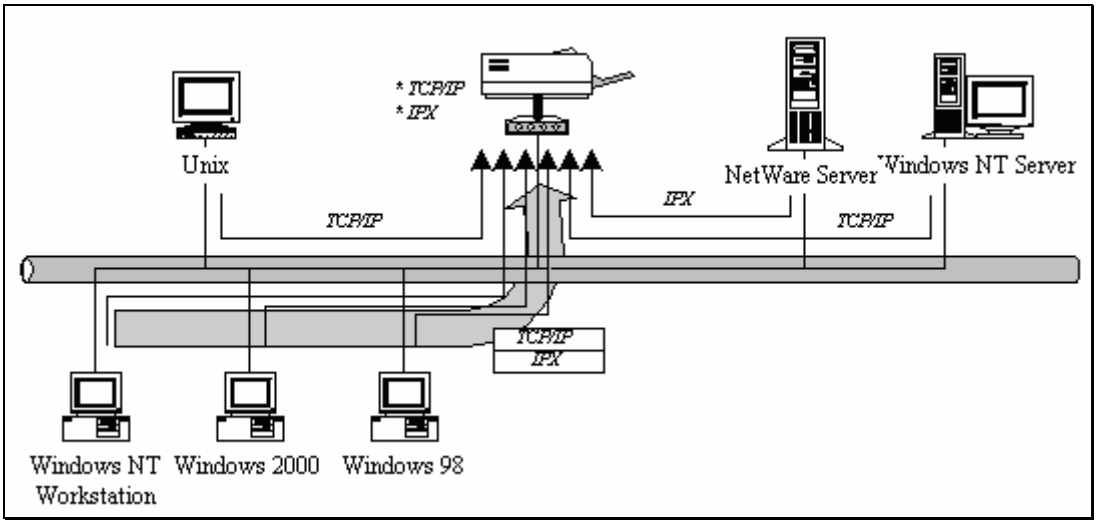
Network Server (Optional)



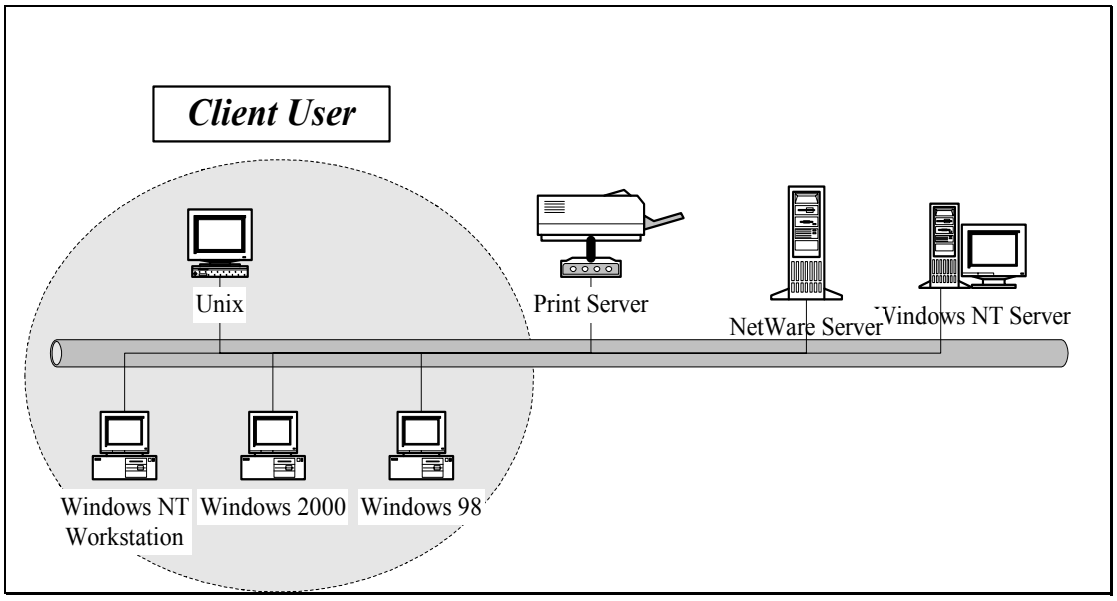
1.3.1 Print Server Network Functions



Because this print server supports IPX/SPX, NetBEUI, TCP/IP and AppleTalk network protocols, any networked computer can directly print to the print server from any of its installed protocol.



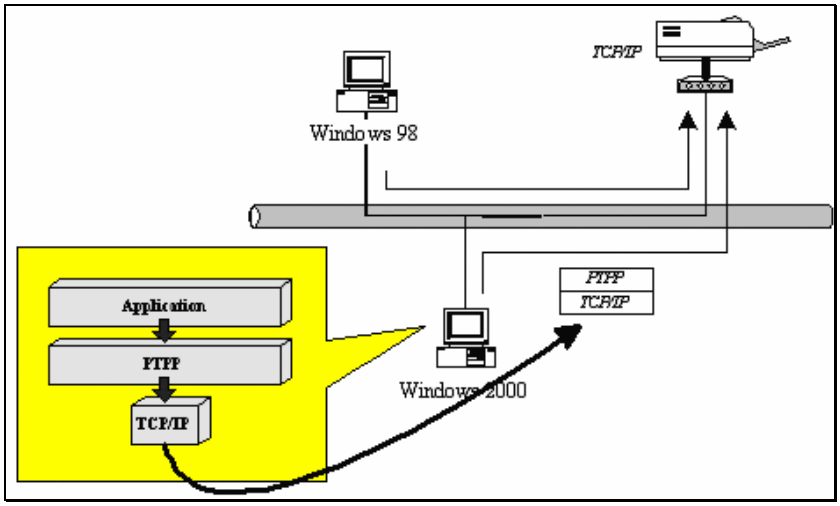
1.3.2 Network Printing Functions for Clients



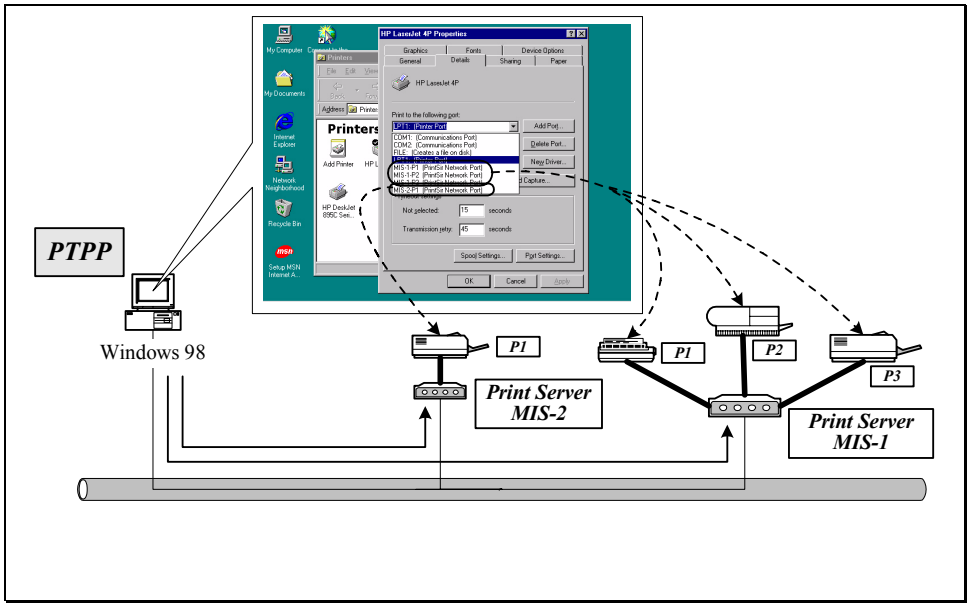
Common operating systems for clients are classified as follows:

Windows 98SE/Me/NT/2000/XP/2003/Vista

Our print server system provides PTPP (Peer-to-Peer Printing) driver and utilities for Windows 95/98SE/Me/NT/2000/XP/2003/Vista users. PTPP (Peer-to-Peer Printing) supports TCP/IP protocols.



In the client installation procedure, after PTPP (Peer-to-Peer Printing Driver) is installed into Windows, the system will automatically (manual configuration is also allowed) search all the print servers on the network, and then add their printing ports into Windows' printing port. (See below)



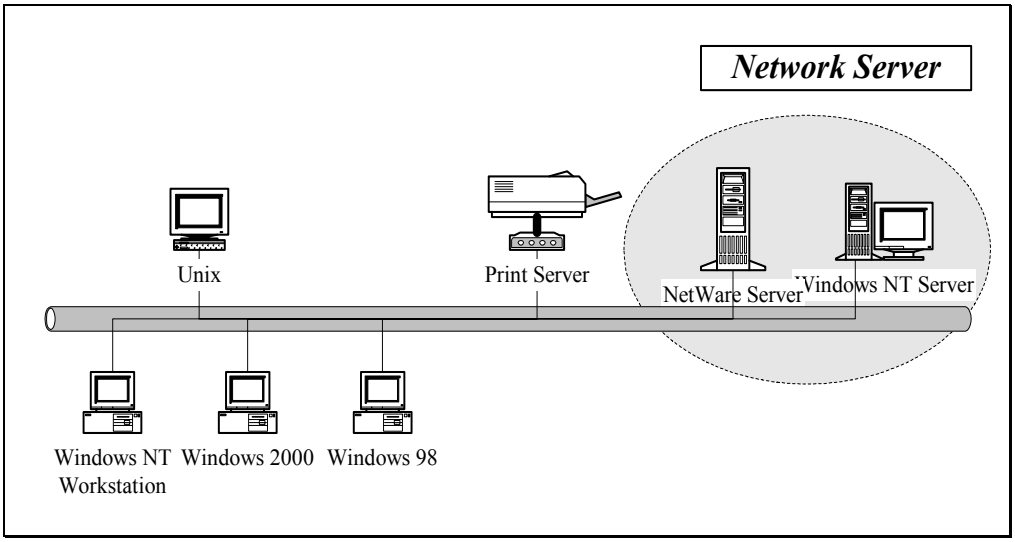
UNIX/Linux

UNIX (include HP/UX, SCO Unix, SunOS, Solaris, UnixWare DECUnix, IBM AIX and others) and Linux use the system standard LPR to print through print server.

MAC OS

MAC OS can use the system standard AppleTalk network to print through the print server.

1.3.3 Network Printing Functions for Network Sever



Common network servers are classified as follows:

Windows NT/2000/2003/Vista

Our print server system provides PTPP (Peer-to-Peer Printing) driver and utilities for Windows NT/2000/2003/Vista. After PTPP is installed, the server can directly print through the print server. Adding this print function into Windows NT/2000/2003/Vista Server allows print queue, user authority management, and many other advanced features to be used.

NetWare 3.x/4.x/5.x

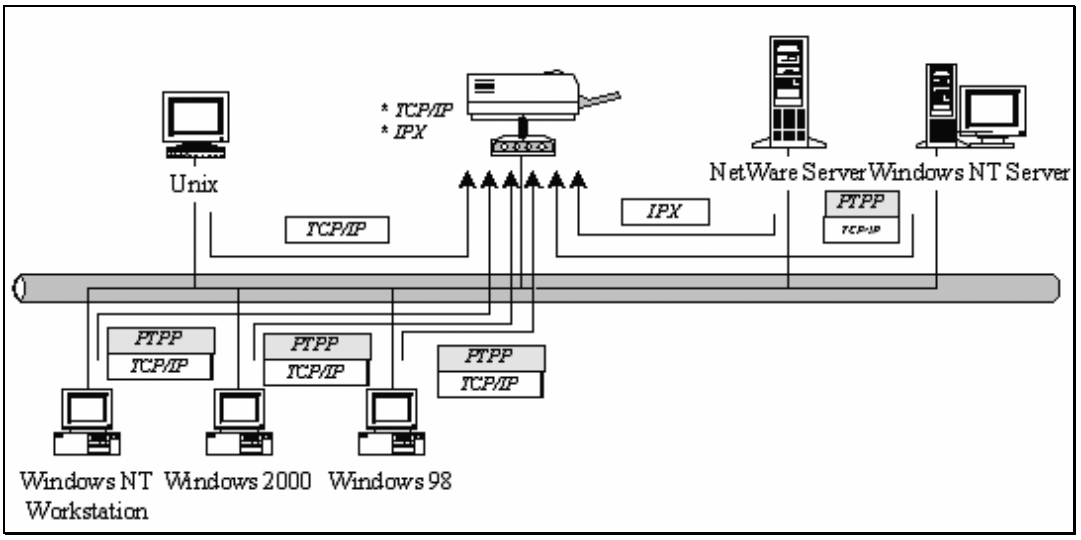
In NetWare environment, the print server offers various printing modes like print queue, remote printer, and etc.

1.4 Network Printing Environment

Common network environment are classified as follows:

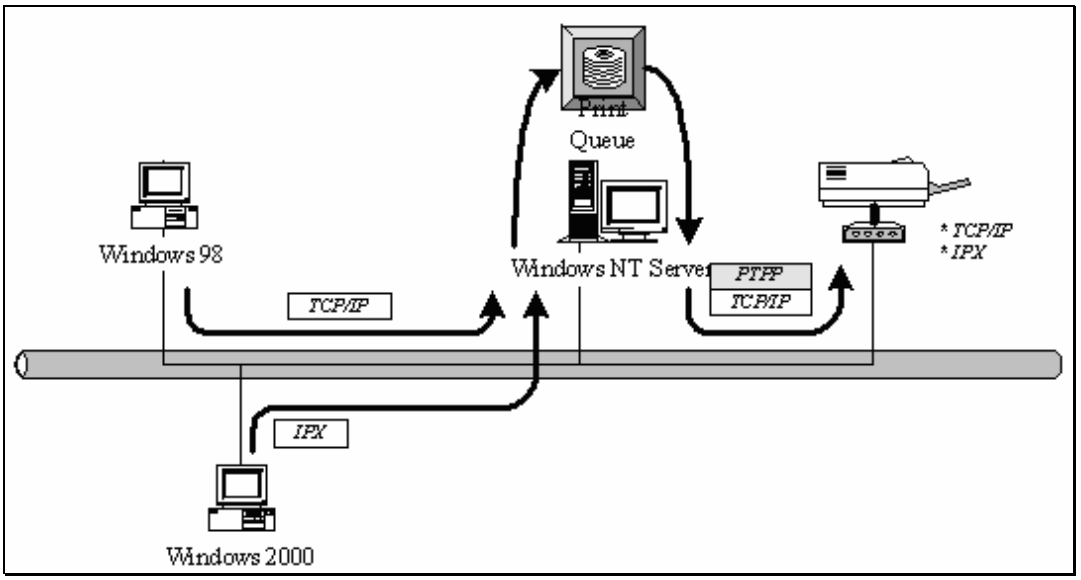
Windows Peer-to-Peer Network

The client's PTPP driver will use TCP/IP protocol to print through the print server.

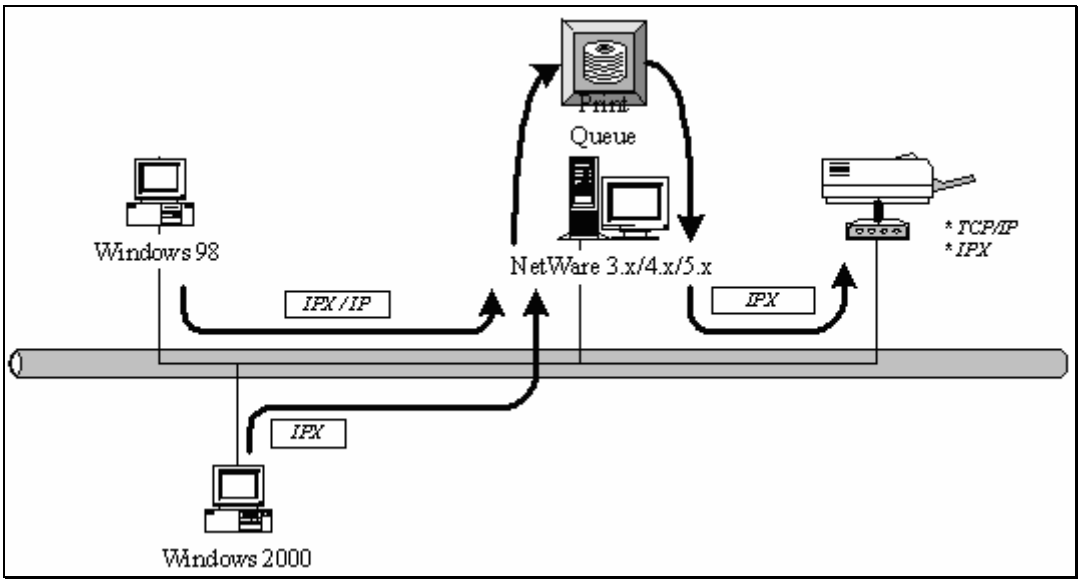


Windows NT/2000/2003/Vista Network

Network printing function will become available after the PTPP driver is installed into Windows NT/2000/2003/Vista. Adding this printing function into Windows NT/2000/2003/Vista Server allows for print queue, user authority management, and many other advanced features to be used.



NetWare Network (See below)



1.5 Firmware and Printing Function

The print server provides a complete network printing solution. The feature set is listed below.

PTPP (Peer-to-Peer Printing)

TCP/IP (LPR)

IPP Printing

NetWare Bindery Printing

AppleTalk

SMB Printing

Chapter 2: Hardware Installation

1. Unpack the print server package and verify that all the items listed in Section 1.2 are provided.
2. Connect the print server to the printer you want to share on the network.
3. Connect the print server to your network by attaching the network cable to the UTP port of the print server.
4. Connect the power adapter to the print server. The print server will perform the Power-On-Self-Test (POST) after it is powered on. During POST, the Status LED will be on. When the LEDs are unlighted, the print server is ready.

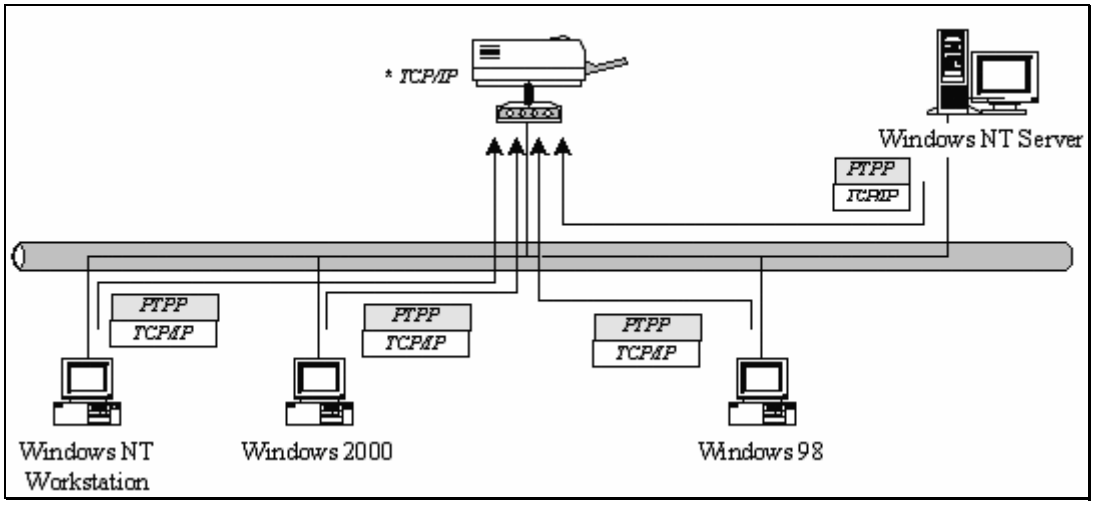
Note: The print server MUST use the power adapter that came with the package. Do NOT use any other power adapter from any other sources.

Note: To prevent any compatibility problems between the print server and other printers, it is recommended that you power on the print server before the printer.

Chapter 3: Windows Peer-to-Peer Network

3.1 System Architecture

This print server supports Windows Peer-to-Peer network printing mode, which is suitable for most medium and small network environments. Through quick and simple installation procedure, users can immediately enjoy the convenience of network printing.



Installation procedure is separated into the following two parts:

1. Administrator Installation and Setup (refer to Section 2 for more detailed information).
   System administrators must:
   Install administrator's utilities into ones computer.
   Configure print server from administrator's configuration utility.

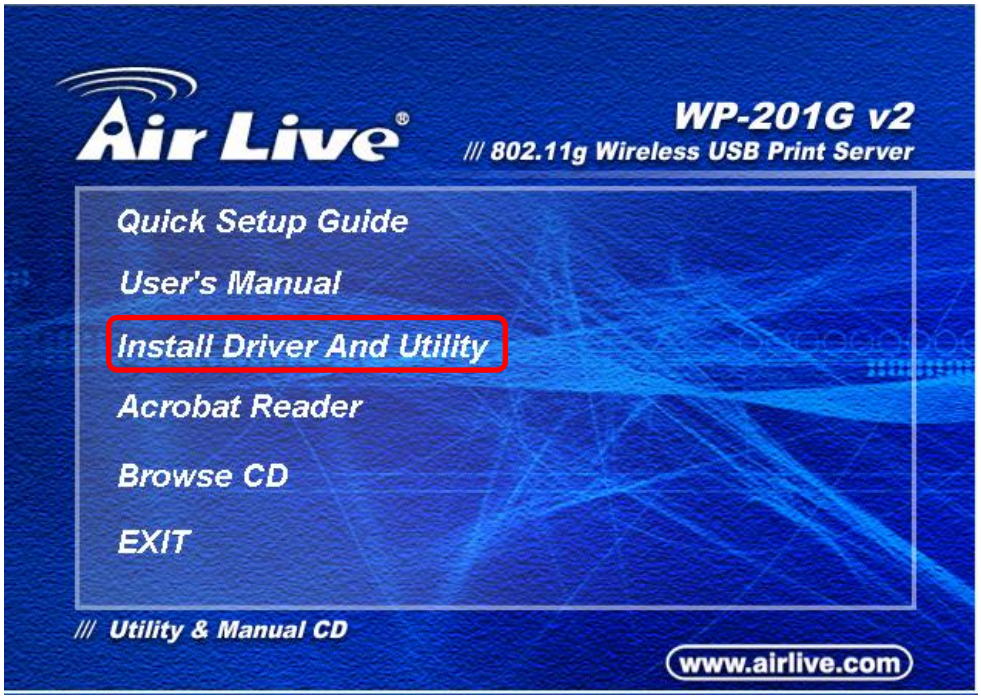
2. Client users must install Windows PTPP driver (Peer-to-Peer Printing) for network printing.

In addition, after PTPP is installed, the system will automatically search for all print servers on the network, and add the printing port of the print servers into Windows' printing port (refer to Network Printing Architecture in Section 1.4 for more detailed information).

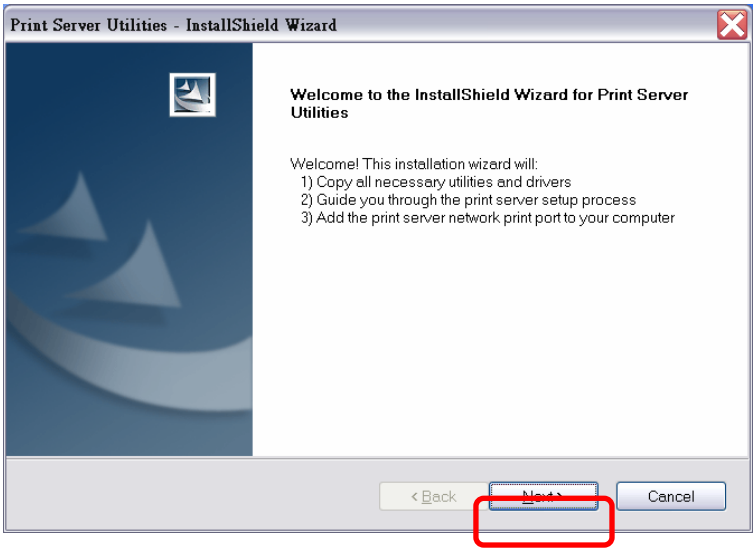
3.2 Installation and Setup

The Installation can be performed on Windows 98SE/Me/NT/2000/XP/2003/Vista with the same user interface. Before this installation, please verify that your network protocol is installed on your PC (TCP/IP, IPX and/or NetBEUI). It will be helpful in your installation process.

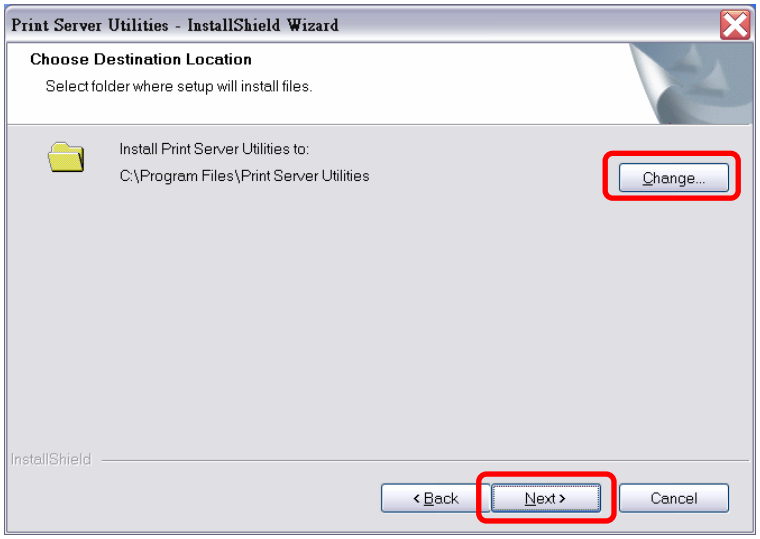
1. Insert the CD that came with the print server into the CD-ROM drive. The Autorun.exe program should be executed automatically. If not, run Autorun.exe manually from CD-ROM drive's root directory.
2. Click **Install Driver And Utility** from the Auto-Run menu screen.



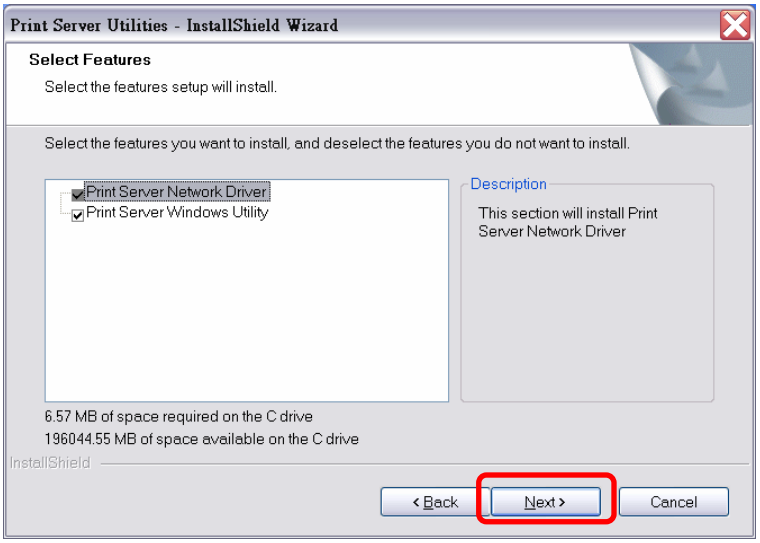
3. The "Print Server Utilities" window will be displayed. Click **Next**.


Print Server Utilities - InstallShield Wizard
Welcome to the InstallShield Wizard for Print Server Utilities
Welcome! This installation wizard will:
1) Copy all necessary utilities and drivers
2) Guide you through the print server setup process
3) Add the print server network print port to your computer
< Back
Next >
Cancel

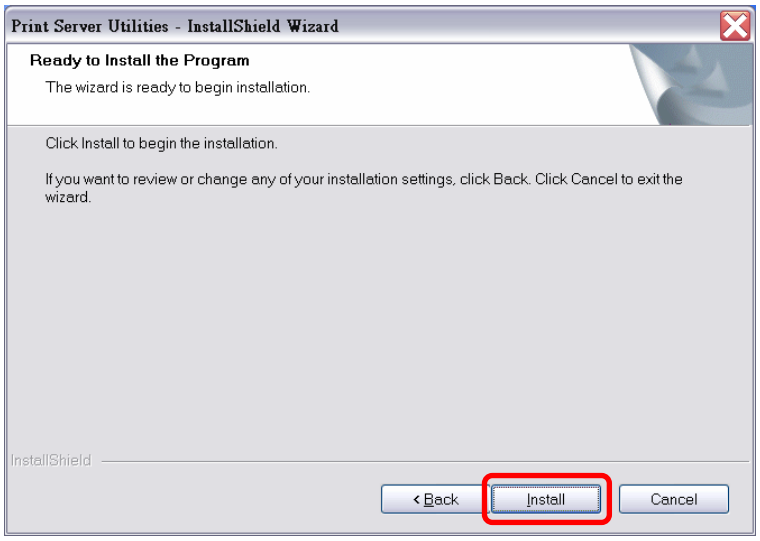
4. Click **Next** to install the utilities in the default folder or click **Change** to specify the destination folder where you would like to install the utilities.



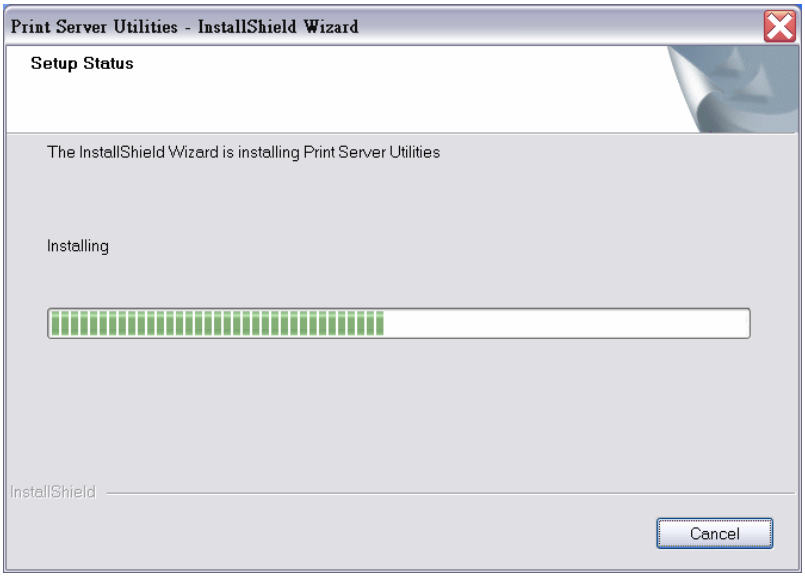
5. Select the features you want to install. It is highly recommended to install all provided components. Click **Next** to continue.


Print Server Utilities - InstallShield Wizard
Select Features
Select the features setup will install.
Select the features you want to install, and deselect the features you do not want to install.
Print Server Network Driver
Print Server Windows Utility
Description
This section will install Print Server Network Driver
6.57 MB of space required on the C drive
196044.55 MB of space available on the C drive
InstallShield
< Back
Next >
Cancel

6. Now, the Wizard is ready to begin installation, click **Install** to begin installation.


Print Server Utilities - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

7. The system will start to install the utilities automatically.



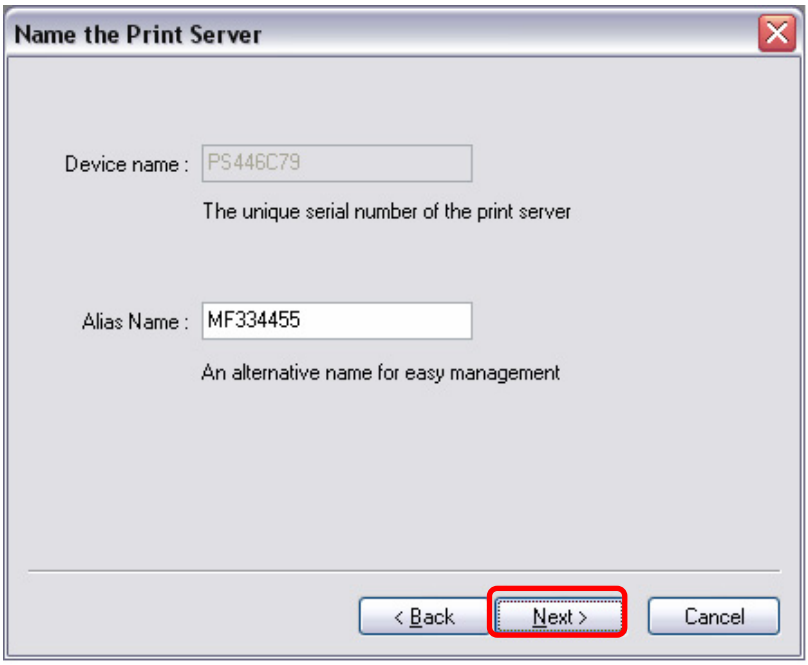
8. You have completed the installation phase and are now ready to configure the print server. The “Choose Print Server” will list all print servers within the network. Select the print server you would like to configure and click **Next**.

Print Server List
Choose print server
MF334455
If the Print Server is installed for the first time,
the "Print Server Name" is the last 6 digit of
MAC ID of the Print Server with a "PS" prefix
Refresh
< Back
Next >
Cancel

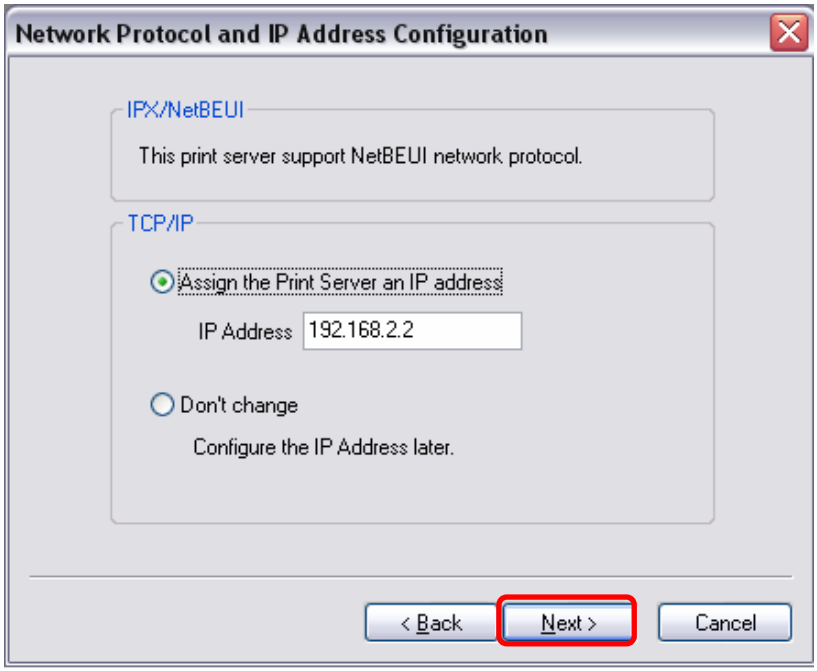
Note: If this is the first time you configure the print server, the “Print Server Name” is the last 6-digit of MAC ID with prefix “PS”. Please check the MAC ID on the print server.

Note: The list can only display the devices from the same manufacturer.

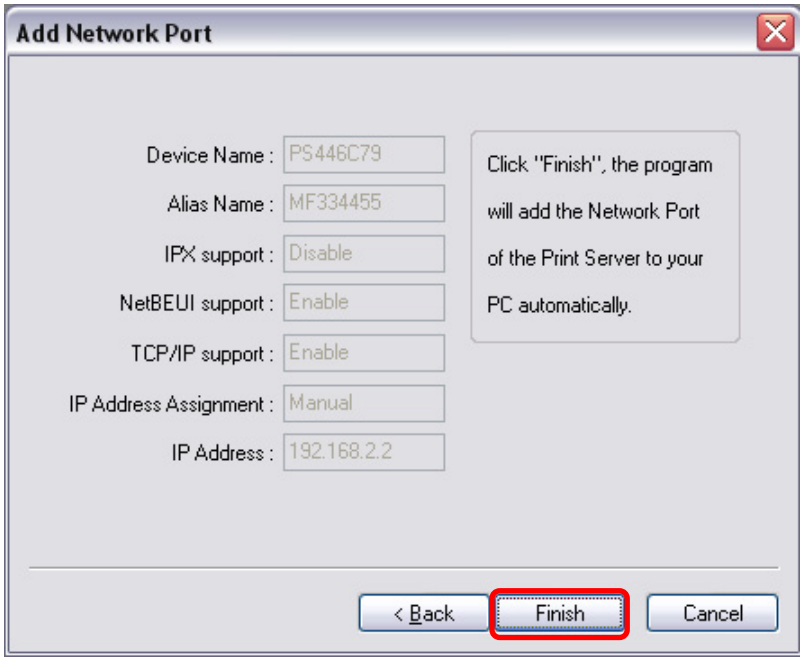
9. Specify a recognizable name for the print server and click **Next**.



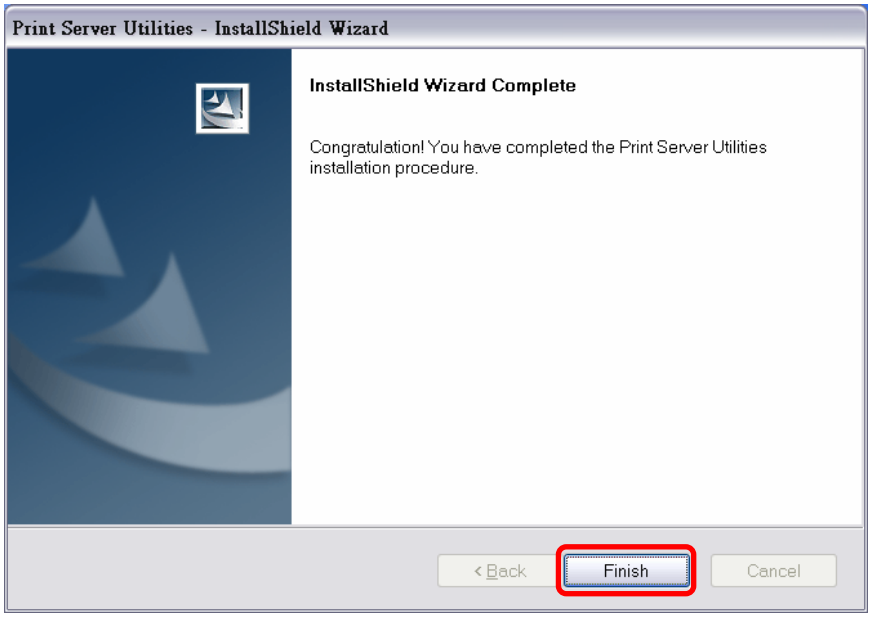
10. Assign the IP Address for the print server manually or click **Don't change** to keep default IP Address, i.e. 192.168.2.2



11. Click **Finish**, the program will add the Network Port of the Print Server to your PC automatically.


Add Network Port
Device Name : PS446C79
Alias Name : MF334455
IPX support : Disable
NetBEUI support : Enable
TCP/IP support : Enable
IP Address Assignment : Manual
IP Address : 192.168.2.2
Click "Finish", the program will add the Network Port of the Print Server to your PC automatically.
< Back
Finish
Cancel

12. The Installation procedure is totally completed. Click **Finish**.



3.3 Print Server Utilities

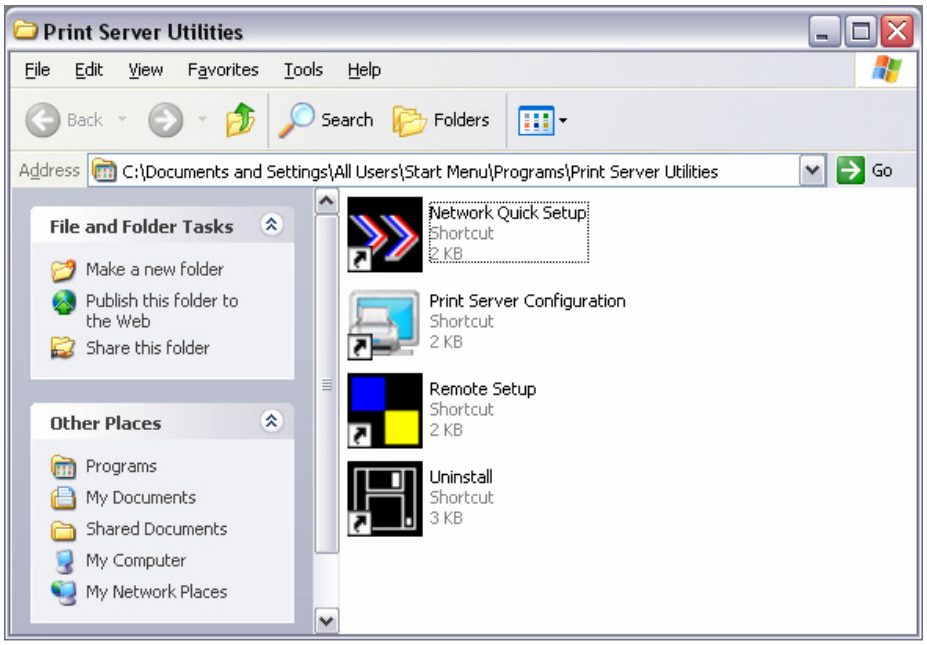
After Installation is completed, there will be four utilities in the print server's Program folder.

Network Ports Quick Setup – Add the network ports of print servers within the network to your PC.

Print Server Configuration – Allows you to configure the print server's IP address, network protocols and other advanced functions. Please refer to Chapter 7 for detailed instructions of the configuration.

Remote Ports – Add the network port of remote printer server to your PC.

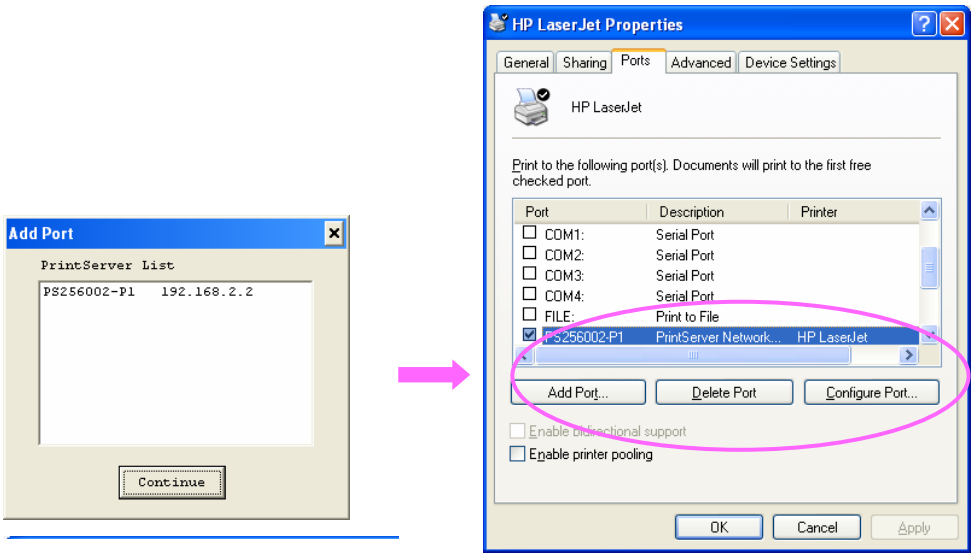
Uninstall – Assistant for removing all installed Print Server Utilities software.



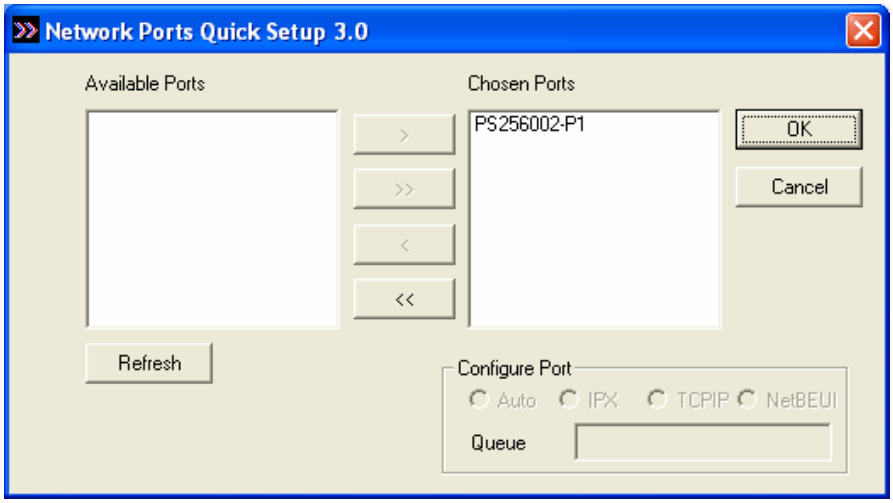
3.3.1 Network Ports Quick Setup

Network Ports Quick Setup Utility offers a very simple method to add or remove print server's printer port from the client's computer.

During the client's installation procedure, the system will automatically search for all print servers on the network, and add them into the printer ports of the client's computer. (See below)



If you have just installed another new print server in the network, you must run this program first. This program will search for new print servers and allow you to add the new network printer port into the client's computer. Perform that standard Add Printer procedure, and you can print directly to the printer through the newly installed print server.



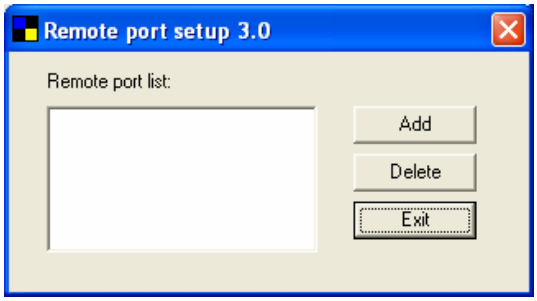
Please be aware that Network Ports Quick Setup Utility can only detect and configure all print servers on other subnets across network segments. You must use Remote Ports Utility as described in the next section to manage remote (across network segments) print server.

3.3.2 Remote Ports (Utility)

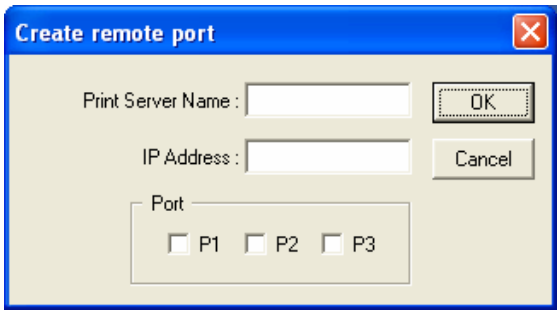
Remote Ports Utility offers a convenient way for you to manage and add printer port of the remote print server. From the assistant of this utility, you can print to other print servers outside the subnet across network segment. However, please note that this function only supports TCP/IP network protocol.

Please follow the procedures as described below:

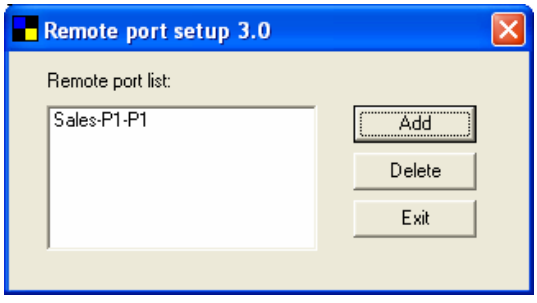
Step 1: Run Remote Ports Utility. Click **Add** to add a remote print port.



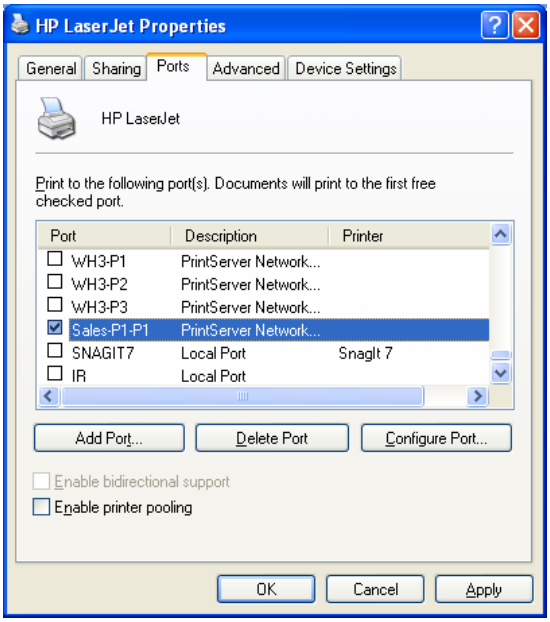
Step 2: Enter print server's name and IP address. Select used ports, and enter LPR queue name of each port. Click **OK**.



Step 3: The new remote print port is displayed as follows:



In order to use the remote printing function, you will have to proceed with normal Add Printer procedure and select your printer port as the newly added remote printer port.



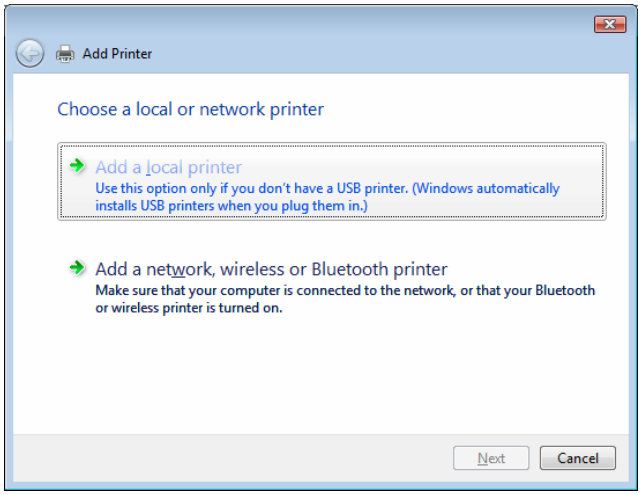
3.4 Windows Add Printer Procedure

After adding a “Network Port” of the print server to your PC by Administrator or Client Installation Program, you can follow the procedure described below to add printer to Windows. Note that following “Add Printer” steps are running in Windows XP, the steps in other operating systems are similar.

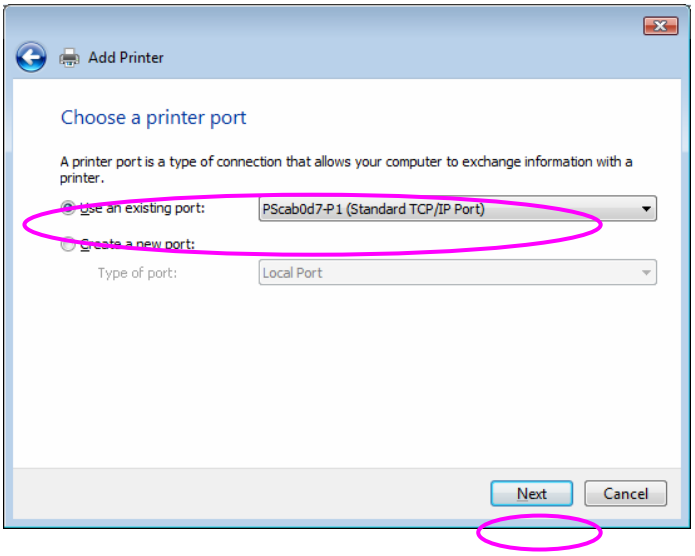
3.4.1 Windows Vista

The following “Add Printer” steps are running in Windows Vista.

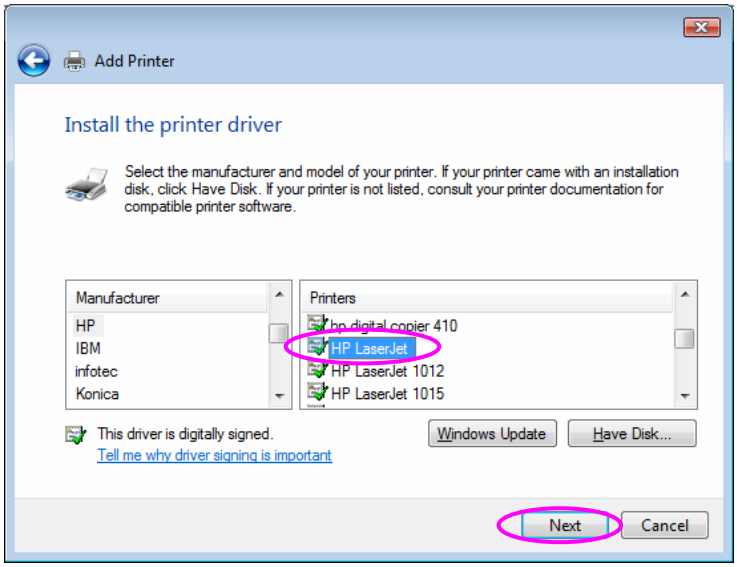
1. Click **Start**, select “Settings/Printers”.
2. Click “**Add a Printer**”.
3. The “Add Printer” wizard is displayed. Select “**Add a local printer**”.


Add Printer
Choose a local or network printer
Add a local printer
Use this option only if you don't have a USB printer. (Windows automatically installs USB printers when you plug them in.)
Add a network, wireless or Bluetooth printer
Make sure that your computer is connected to the network, or that your Bluetooth or wireless printer is turned on.
Next
Cancel

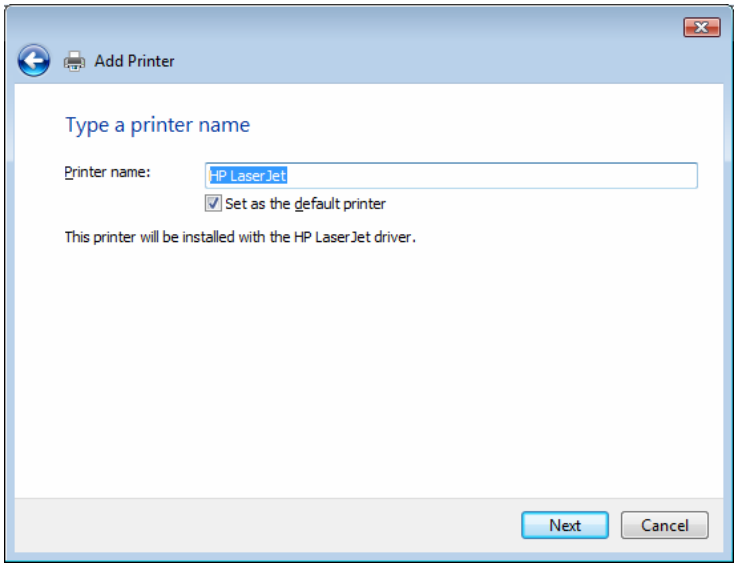
4. Choose the suitable printer port which was created by the installation process and click **Next**.


Add Printer
Choose a printer port
A printer port is a type of connection that allows your computer to exchange information with a printer.
Use an existing port:
PScab0d7-P1 (Standard TCP/IP Port)
Create a new port:
Type of port:
Local Port
Next
Cancel

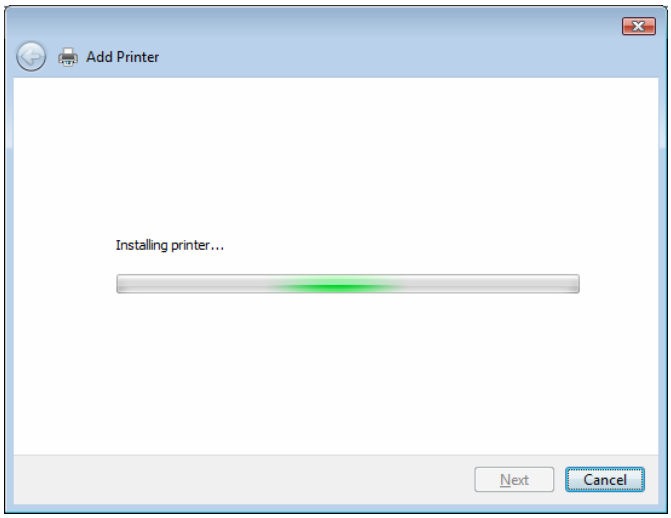
5. Select the printer manufacturer and the printer model and click **Next**. If your printer is not in the list, click "**Have Disk…**" to install the driver of the printer. After installation, the printer model will be added to the list.



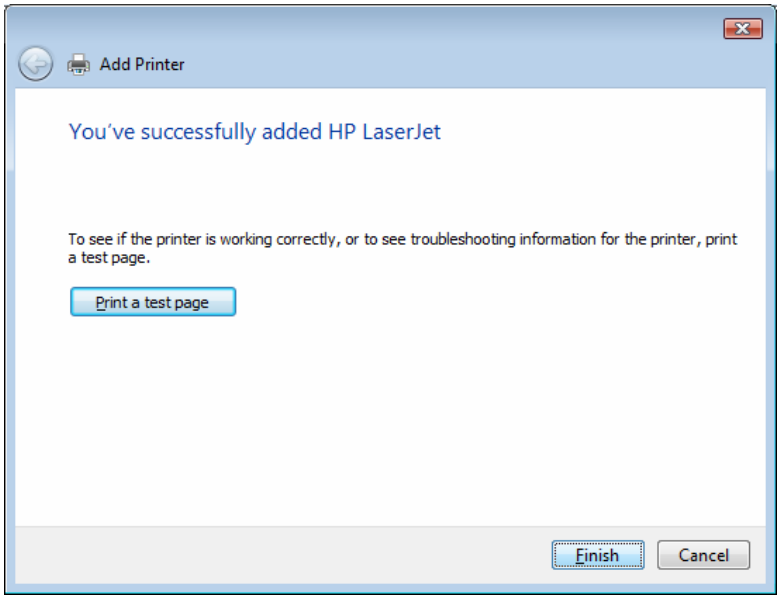
6. Name your printer and set the default printer, click **Next**.



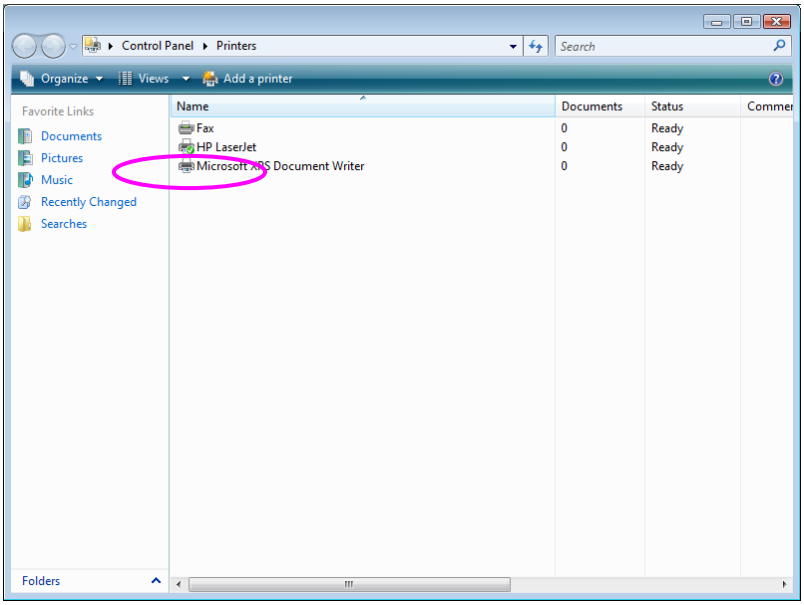
7. The printer drivers are being installed.



8. It is recommended to print a test page. Click **Finish**.


Add Printer
You've successfully added HP LaserJet
To see if the printer is working correctly, or to see troubleshooting information for the printer, print a test page.
Print a test page
Finish
Cancel

9. The printer is added to “Printers” page, you have added the printer to your computer successfully. Now you can start to print from your computer to the print server.

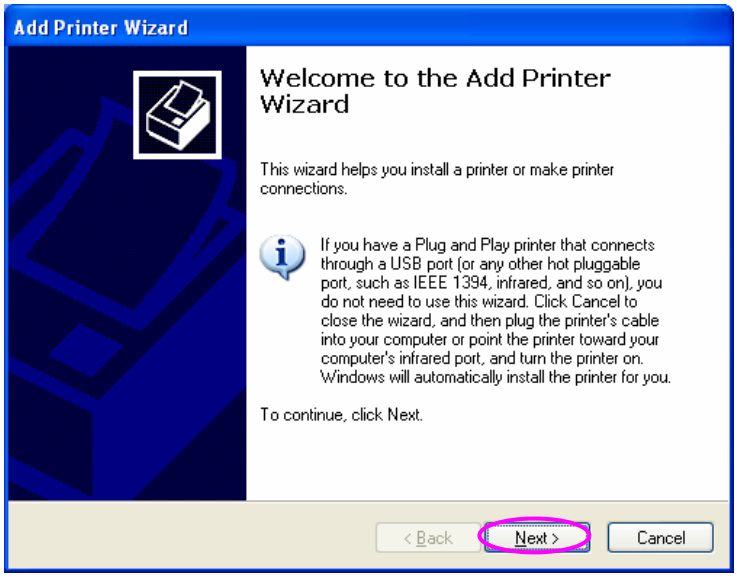


3.4.2 Windows XP

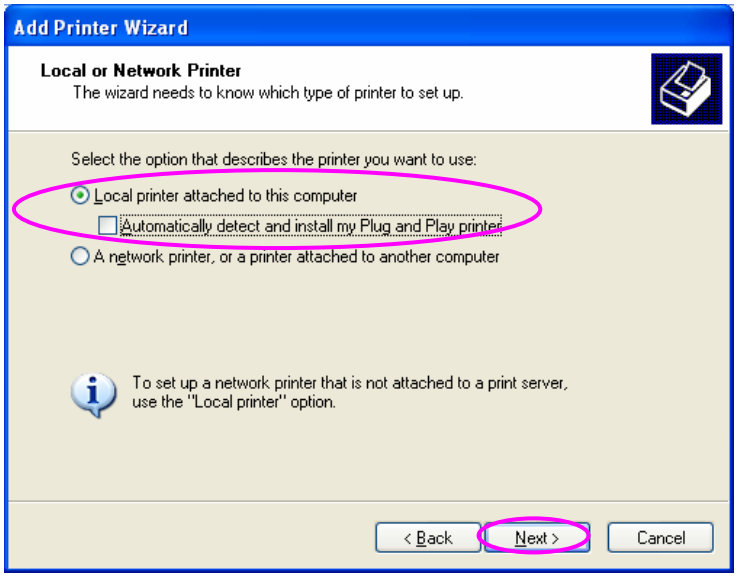
Step 1. Click **Start**, choose **Settings** and select “**Printers and Faxes**”.

Step 2. Click “**Add a Printer**”.

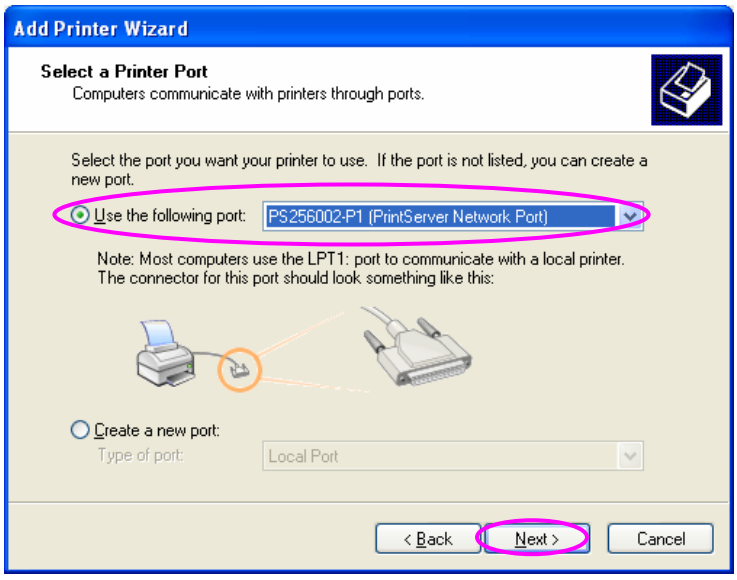
Step 3. The “**Add Printer Wizard**” is displayed. Click **Next**.


Add Printer Wizard
Welcome to the Add Printer Wizard
This wizard helps you install a printer or make printer connections.
If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.
To continue, click Next.
< Back
Next >
Cancel

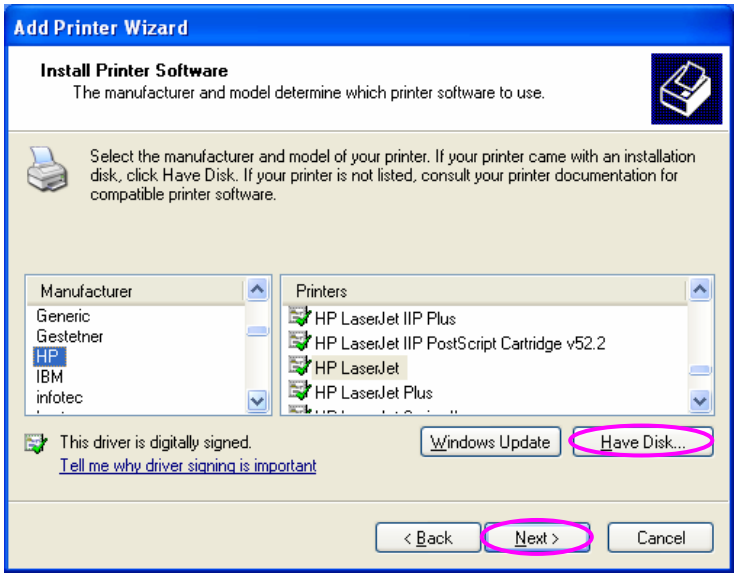
Step 4. Select “Local printer attached to this computer” and make sure that “Automatically detect and install my Plug and Play printer” is not selected. Click **Next**.


Add Printer Wizard
Local or Network Printer
The wizard needs to know which type of printer to set up.
Select the option that describes the printer you want to use:
Local printer attached to this computer
Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computer
To set up a network printer that is not attached to a print server, use the "Local printer" option.
< Back
Next >
Cancel

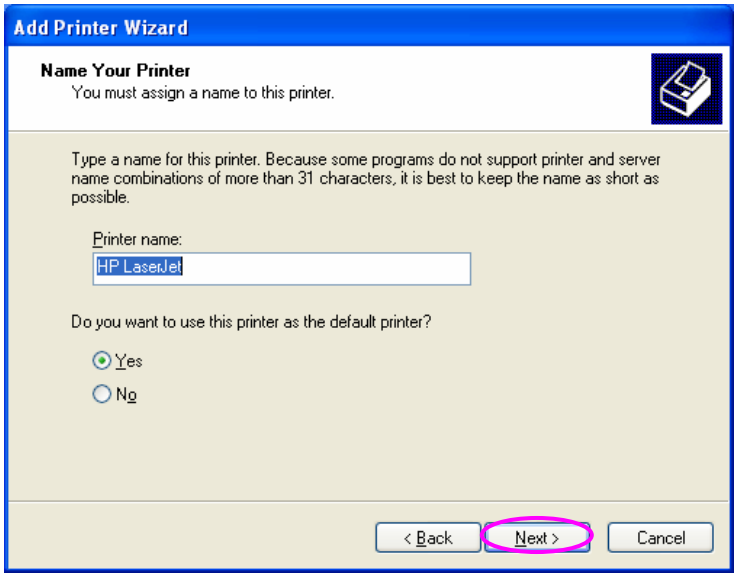
Step 5. Choose the suitable “Print Server Network Port” which was created by the Administrator Installation or Client Installation process and click **Next**.


Add Printer Wizard
Select a Printer Port
Computers communicate with printers through ports.
Select the port you want your printer to use. If the port is not listed, you can create a new port.
Use the following port:
PS256002-P1 (PrintServer Network Port)
Note: Most computers use the LPT1: port to communicate with a local printer. The connector for this port should look something like this:
Create a new port:
Type of port:
Local Port
< Back
Next >
Cancel

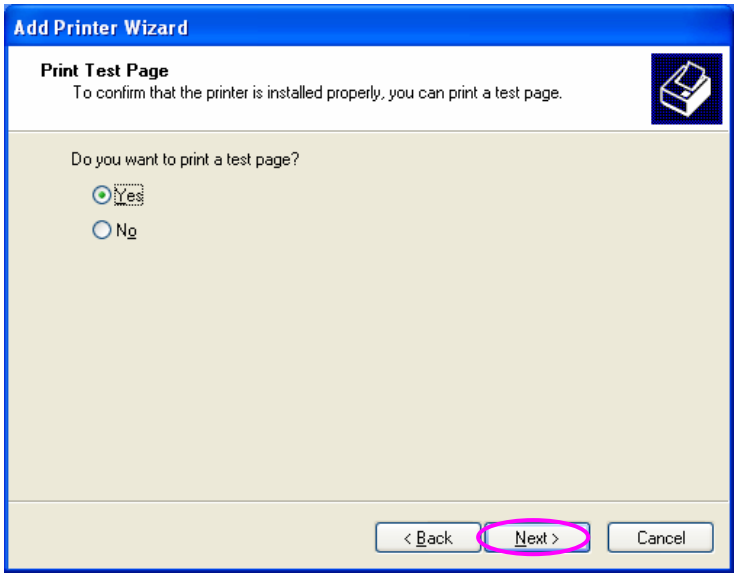
Step 6. Select a suitable printer manufacturer and the printer model and click **Next**. If your printer is not in the list, click "**Have Disk…**" to install the driver of the printer. After installation, the printer model will be added to the list.


Add Printer Wizard
Install Printer Software
The manufacturer and model determine which printer software to use.
Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for compatible printer software.
Manufacturer
Generic
Gestetner
HP
IBM
infotec
Printers
HP LaserJet IIP Plus
HP LaserJet IIP PostScript Cartridge v52.2
HP LaserJet
HP LaserJet Plus
This driver is digitally signed.
Tell me why driver signing is important
Windows Update
Have Disk...
< Back
Next >
Cancel

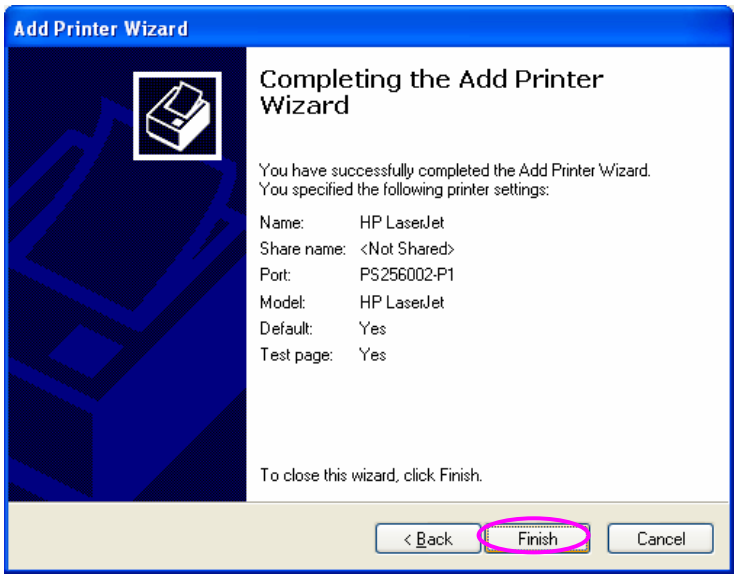
Step 7. Name your printer and setup the default printer, click **Next**.


Add Printer Wizard
Name Your Printer
You must assign a name to this printer.
Type a name for this printer. Because some programs do not support printer and server name combinations of more than 31 characters, it is best to keep the name as short as possible.
Printer name:
HP LaserJet
Do you want to use this printer as the default printer?
Yes
No
< Back
Next >
Cancel

Step 8. Choose to print the test page or not. It is recommended to print a test page. Click **Next**.


Add Printer Wizard
Print Test Page
To confirm that the printer is installed properly, you can print a test page.
Do you want to print a test page?
Yes
No
< Back
Next >
Cancel

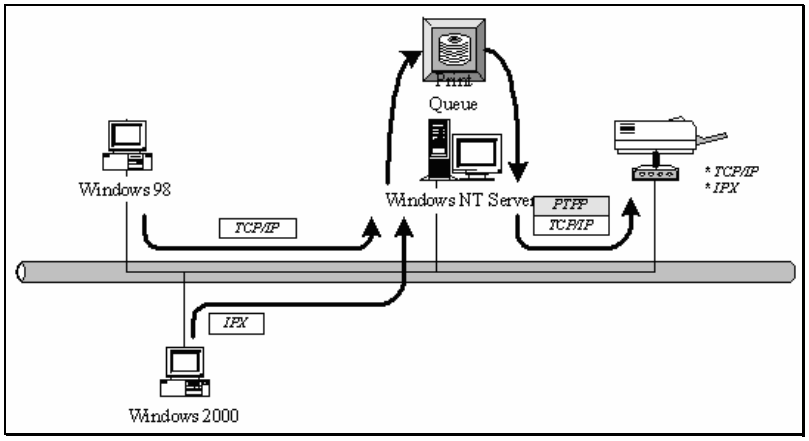
Step 9. You have added the printer to the PC successfully. The information of the printer is displayed in the windows. Click **Finish**.



Chapter 4: Windows NT/2000/2003 Network

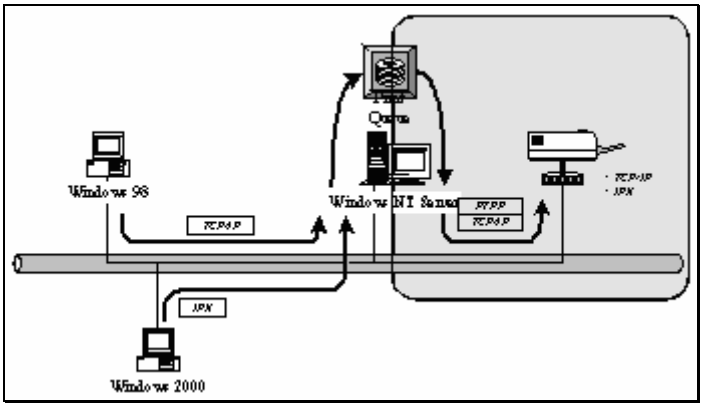
4.1 System Architecture

In Windows network environment, other than the Peer-to-Peer network printing architecture described in the previous chapter, we also offer the server-based Printing architecture for Windows NT/2000/2003 server. Only one Windows NT/2000/2003 is required to have Windows PTPP (Peer-to-Peer Printing) driver installed and share the printing service on the network. Other network users can simply connect to the server and access the shared printer (See below).



4.2 Windows NT/2000/2003 Server Installation and Setup

Please follow the procedures described below for installation and construct a Peer-to-Peer connection (PTPP) between Windows NT/2000/2003 Server and print server.



Step 1

If this is your first time installing the print server, please install the administrator software on Windows NT/2000/2003 server first. Refer to Section 3.2 for installation instructions.

If your network has already installed a working print server and your Windows NT/2000/2003 server has not yet installed the PTPP driver, please install the client software. Refer to Section 3.4 and 3.5 for installation instructions.

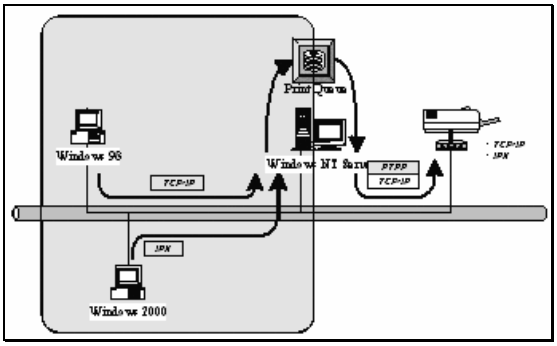
Step 2

Please add/configure the Peer-to-Peer Printing of the Windows NT/2000/2003 network printer and verify that you can print from Windows NT/2000/2003 to the print server by the installed PTPP driver.

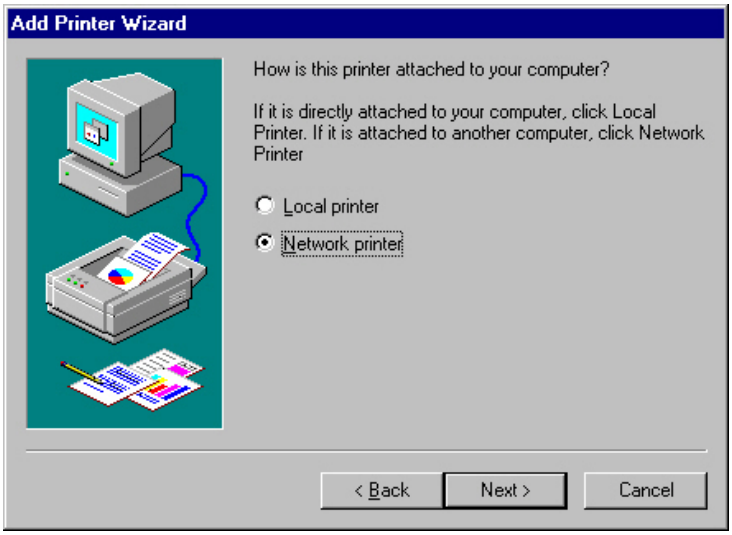
Step 3

Share the above server's printer to the network by performing the standard Windows printer sharing process.

4.3 User Installation and Setup



After server side's installation is completed, client side will be able to find the server's shared printer in Network Neighborhood. You only need to perform Window's standard **Add New Printer** procedure, select "**Network Printer**" shown in the screen below, and complete the configurations afterwards to access the shared printer.

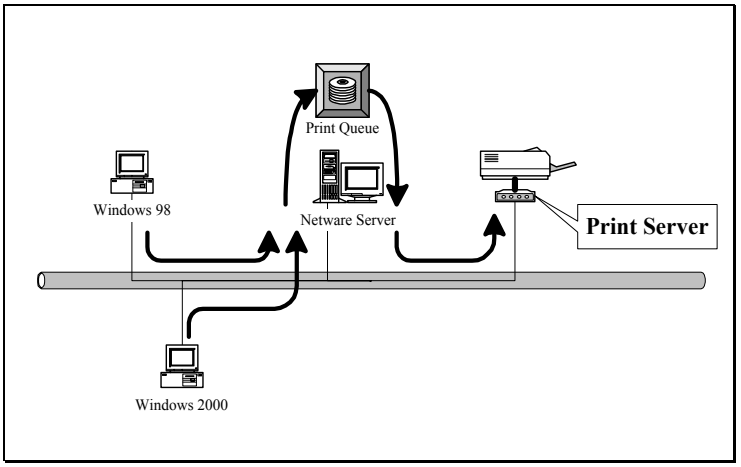

Add Printer Wizard
How is this printer attached to your computer?
If it is directly attached to your computer, click Local Printer. If it is attached to another computer, click Network Printer
Local printer
Network printer
< Back
Next >
Cancel

Chapter 5: NetWare Network

5.1 System Architecture

We implemented NetWare printer sharing functionality into the print server itself, thus allowing one or more printers attached by a print server to be connected to the network. We have developed the print server to support NetWare print server.

The embedded print server, which emulates the “queue management functionality” of NetWare print server, can act as the PSERVER program running on the NetWare server. A user first prints a job at a workstation, the job is routed to a NetWare server, the NetWare server stores the job in a print queue and then the print server gets the print job from the queue to printers.



Compare with NetWare printing functionality, the advantages of embedding the NetWare network printing functionality in the print server include:

Installation is easier and quicker.
Network management is easier.
Printing performance is enhanced.
Relieve NetWare file server’s burden.
Relieve the need of a workstation running the remote printer utility.
Improve productivity by locating the printer near the workgroup.

Each print server should log into a NetWare server before servicing the print jobs. Each print server will occupy a user account with which it can log into the NetWare server.

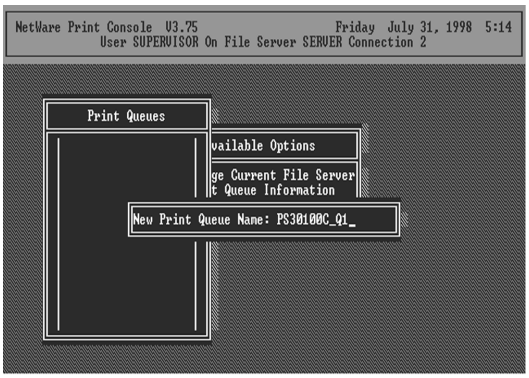
5.2 NetWare 3.x/4.x/5.x Installation & Setup

Once your print server is connected to your Ethernet network, you can set it up for use with your networking software.

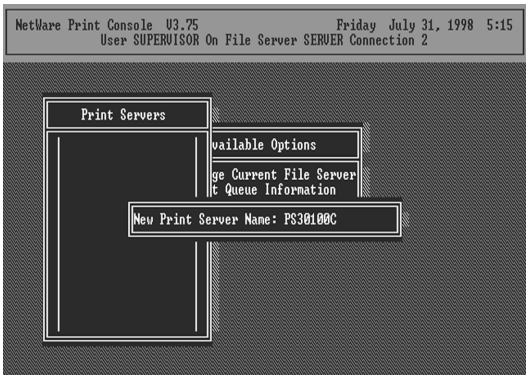
5.2.1 Installation Using PCONSOLE

5.2.1.1 Configuring as Print Server Mode

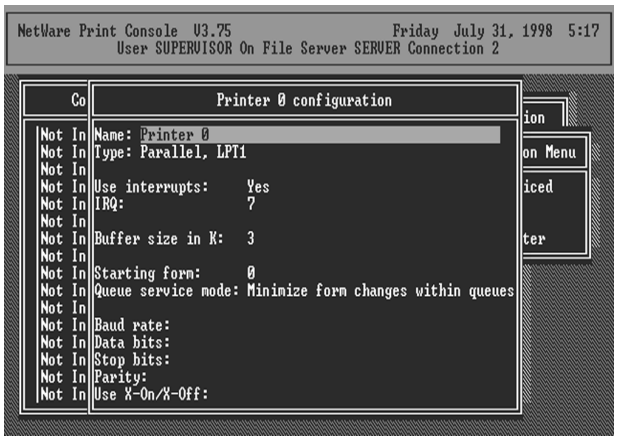
1. Run the NetWare PCONSOLE program.
2. Change the current file server, if necessary, using the Change Current File Server menu selection.
3. Choose the Print Queue Information menu selection.
4. Press the Insert Key to add a new print queue.
5. Type in a print queue name, such as “PQ” or “Q1”.


NetWare Print Console V3.75 Friday July 31, 1998 5:14
User SUPERVISOR On File Server SERVER Connection 2
Print Queues
vailable Options
ge Current File Server
t Queue Information
New Print Queue Name: PS30100C_Q1_

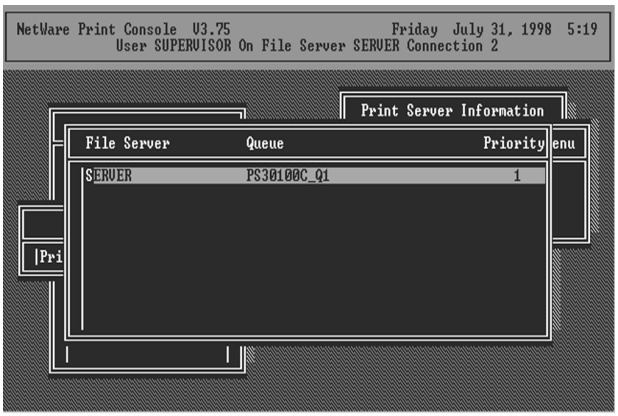
6. You have new successfully created the print queue that your print server will serve. Press the Esc key until the Available Options main menu is displayed.
7. Select Print Server Information
8. Press the Insert Key to add a new NetWare print server object. The print server name can be identical to the PSxxxxxx name printed on the label of the print server.


NetWare Print Console V3.75 Friday July 31, 1998 5:15
User SUPERVISOR On File Server SERVER Connection 2
Print Servers
vailable Options
ge Current File Server
t Queue Information
New Print Server Name: PS30100C

9. Press Enter to select the newly created print server.
10. Select Print Server Configuration
11. Select Printer Configuration
12. Select Printer 0 (or Printer 1, Printer 2), and press Enter, then select P1 (or P2, P3) in the Type field. If your print server is with only one port, you do not need to configure this Type field.



13. Press Esc, and answer Yes to the Save Changes question.
14. Select Queues Serviced by Printer, then select Printer 0 (or Printer 1, Printer 2) and press Enter.
15. Press Insert and add your newly created print queue to the list of queues serviced by the printer. Enter a priority number for the queue service, or press Enter to accept the default.



16. Repeatedly press Esc to exit the PCONSOLE program.
17. Reset the print server to have the changes take effect.

Note: If the print server you have is with multiple printer connectors, you may create multiple queues and printer objects.

Your print server should now be ready to use. You should be able to redirect printing to your print server using a CAPTURE command such as the one shown in the previous section.

Chapter 6: UNIX System Network

6.1 Introduction

The print server is available for TCP/IP printing by UNIX LPD (Line Printer Daemon) protocol. The LPD protocol originated with UNIX release is based on the BSD version of UNIX and supported under most versions of UNIX.

This chapter explains how to configure the print server for TCP/IP operation, and how to modify configuration files on your UNIX system to allow printing to the print server. The configuration examples in this manual follow the syntax for BSD-based UNIX systems. Please refer to the related system documentation for the correct syntax for your systems.

To configure the print server for LPD printing, perform the procedures below:

1. Enable Print Server's TCP/IP support.
2. Set up Print Server's IP address.
3. Verify Print Server's IP address.
4. Configure remote LPD printing on the host.
5. Print a test page.

In the next sections, we will describe these five procedures step by step.

6.2 Enable Print Server's TCP/IP Support

The default configuration of the print server is with TCP/IP support enabled. You can configure the print server to enable TCP/IP support using the configuration program.

6.3 Setup Print Server's IP Address

The print server must have a unique IP address in order to be recognized by the network.

You can set up the IP address on the various UNIX systems using any one of the following methods:

1. DHCP (Dynamic Host Configuration Protocol)
2. BOOTP (Bootstrap Protocol)

The print server will use the last three methods to obtain its IP address automatically if its IP address is configured as Auto (0.0.0.0).

6.3.1 DHCP

There are many UNIX systems that support DHCP protocol, and the procedures to configure the DHCP server database are different. This manual does not describe the DHCP server configuration on the UNIX systems. It is highly recommended that the DHCP server should be located on the same network as the print server.

6.3.2 BOOTP

If you have the BOOTP daemon, bootpd, running on your UNIX system that is accessible by the print server, you can use the BOOTP protocol to set up the IP address of the print server. We recommend that the BOOTP server should be located on the same subnet as the print server. If you use Network Information Services (NIS) in your system, you may need to rebuild the NIS map with the BOOTP services before doing the following BOOTP configuration. To rebuild the NIS map, please refer to your system documentation.

To configure the IP address data for the BOOTP server, you will need to log in the host of BOOTP server as the superuser (root). Perform the following steps to add address entries.

1. Optionally, assign a name corresponding to the print server's IP address. You can add this address to the /etc/hosts file, by adding a line such as:

   203.66.191.12 pserver

2. Add an entry to the host's /etc/bootptab file, similar to the following:

   hostname:
   :ht=1:
   :ha=print_server_ethernet_address:
   :ip=print_server_ip_address:

Lines should be indented with tabs.

Where hostname is the device name of a print server, the ht=1 tag specifies the hardware type is Ethernet, the ha= tag specifies the Ethernet address of a print server, which is the Node ID located on the print server. The ha tag must be preceded by the ht tag. The ip= tag should correspond to the IP address you want to assign to the print server.

For example, a print server with the following configuration:

Node ID: 0000B4010101 (this implies Ethernet address is 0000B4010101),
IP address: 203.66.191.12

The entry for this print server in the /etc/bootptab file should be:

PS010101:

:ht=1:

:ha=0000B4010101:

:ip=203.66.191.12:

6.4 Verify Print Server's IP Address

To verify that your print server is responding to the newly assigned IP address using a PING command:

ping ip-address

6.5 Configure Remote LPD Printing on the Host

The procedure you use to configure your UNIX host(s) to allow printing to your network remote print server varies between different varieties of UNIX. The procedures below can be used for UNIX variants that are related to BSD UNIX, such as SunOS or Linux. For other versions of UNIX, consult your system documentation, keeping in mind that:

1. The print server should be treated as a BSD networked print server host.
2. The host name should be the name (or IP address) that you have assigned to the print server.
3. The printer name (or queue name) on the remote host should be p1, p2, or p3, the name of the printer port on the print server.

You will need to perform the tasks below, logged in as the superuser (root) to configure your UNIX host for printing.

1. Optionally, assign a name corresponding to the print server's IP address. You can add this address to the /etc/hosts file, by adding a line such as:

   203.66.191.186 pserver

2. Create a spool directory for the printer in the same directory where spool directories are normally kept on the machine, such as /var/spool or /var/spool/lpd:

   mkdir /var/spool/lpd/pserverd

   chown daemon /var/spool/lpd/pserverd

   chgrp daemon /var/spool/lpd/pserverd

   chmod 775 / var/spool/lpd/pserverd

3. Add an entry to the host's /etc/printcap file, similar to the following:

```
printer-name:\
:lp=:\
:rm=203.66.191.186:\
:rp=p1:\
:lf=/var/spool/lpd/pserverd/log:\
:sd=var/spool/lpd/pserverd:\
:mx#0:
```

Lines should be indented with tabs. More than one printer name can be used, with variants separated by vertical bars (name1|name2).

The rm=entry should correspond to the IP address you have assigned to the print server. You can also use a host name if you have assigned one in the /etc/hosts file.

The sd= entry should correspond to the port name of the remote printer. The values should be one of p1, p2 or p3 depending on the printer port.

The print server should now be available for printing from your UNIX host.

Chapter 7: Configuration Utility

7.1 Introduction

This chapter introduces print server's system configuration utility in the Windows environment. This utility is automatically installed during Windows Administrator Utility installation procedure – refer to Section 3.2 and 3.3.

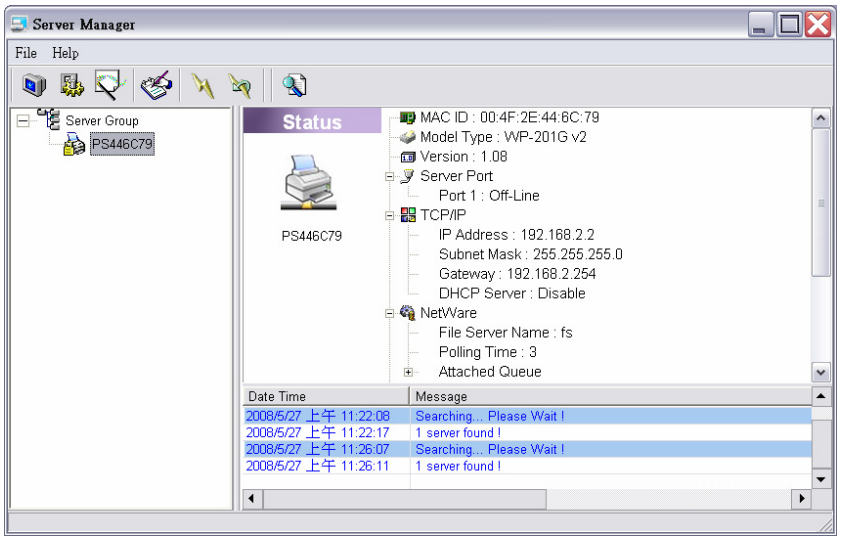
This utility provides the most complete management and configuration functions on the print server side. This utility only provides configuration functions for the print server itself; it does not include configuration functions for client side or other file server or NetWare server in the network environment.

The Configuration Utility provides the following configuration and management functions:

Search Print Server: Search All Available Printer Servers on the Network.
Print Server Status: Display Print Server Network Status.
General Configuration: General Information of print server.
TCP/IP Configuration: IP address and DHCP Server Configuration.
NetWare Configuration: NetWare Printing Configuration.
AppleTalk Configuration: AppleTalk Protocol Setting.
Bonjour Configuration: Mac OSX Protocol Setting
SMB: Configure the SMB Group Name.
SNMP Configuration: SNMP Information Configuration.
Setup Wizard: Guide You Through All the Settings.
System Configuration: Print Server Network Ability Settings, Firmware Upgrade and Language setting.
Wireless Configuration: Wireless LAN Configuration.
Report: List the Status of All Available Print Servers on the Network.

We will explain each function separately in the following section.

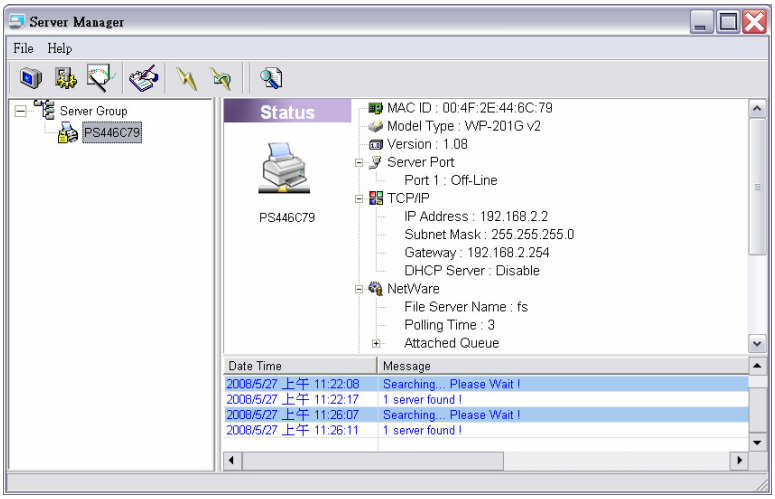
7.2 Search for All Available Print Server



Every time you run the print server's configuration utility, click the "Search" icon on the tool bar. The configuration utility will delay for several seconds because the utility is using the system's available network protocols to search for all print servers on the network. All available print servers will be listed under "Server Group" on the left side of the window.

You must select the print server you would like to configure from the list. The system will, at the same time, display the selected print server's status on the right side of the window.

7.3 Status of Print Server



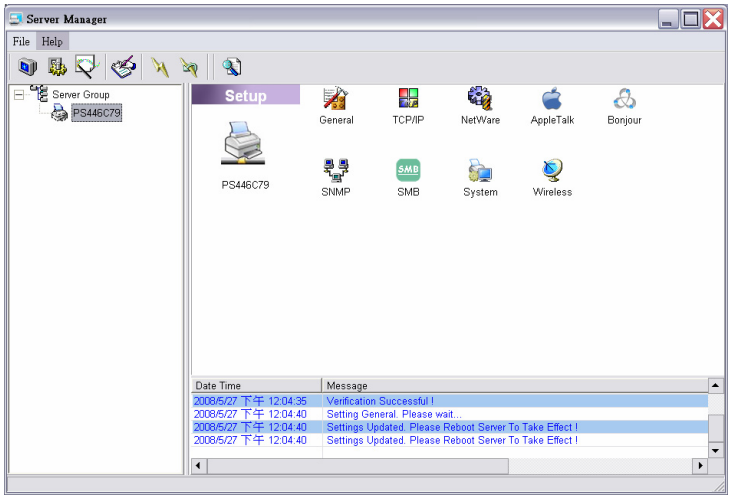
Click on “Status” icon on the tool bar, the status of the current selected print server will be shown on the right side of the window.

The information of the print server displayed are MAC ID, Model Type, Firmware Version, status of each printer port, NetWare file server name, NetWare file server polling interval, NetWare printer queue names, IP address, subnet mask, default gateway, AppleTalk printer type, AppleTalk zone and print server printing ability, etc.

You can refresh the print server’s status by pressing the “Refresh” button.

You can restart the print server by pressing the “Reboot” button.

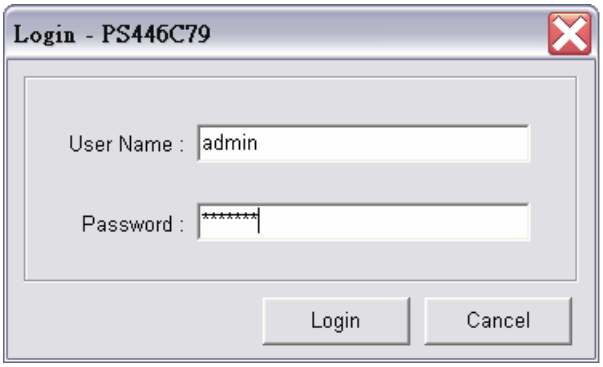
7.4 Setup the Print Server



Click “Setup” icon on the tool bar, the setup items of the current selected print server will be shown on the right side of the window.

Double-click one of the icons to set up the selected print server. A screen will pop up to verify “User Name” and ‘Password” of the print server. The default values are as follows:

- User Name: admin
- Password: airlive



7.5 General Configuration

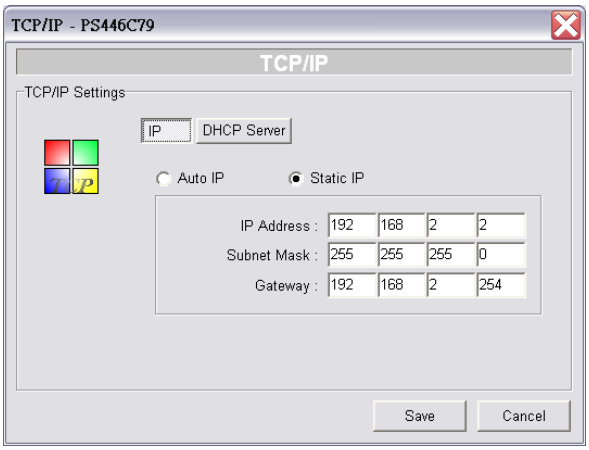
Double-click “General” icon and the General configuration window will pop up.

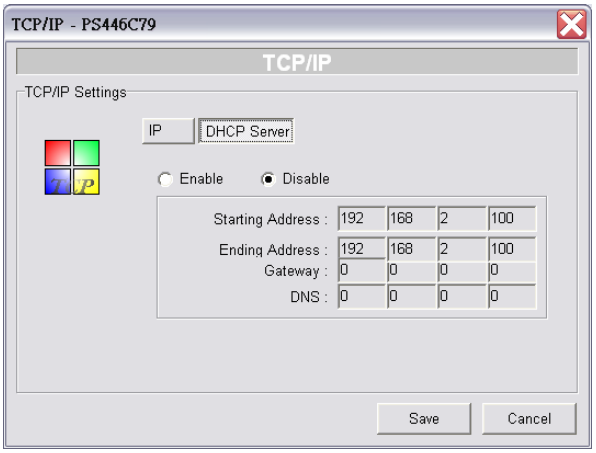
You can see basic print server information in this page. You can also configure the “Server Name”, “User Name” and “Password” here.

Server Name, the name of the print server. You can use this name to identify the print server when you are searching for the print server by the administration and client utilities.

User Name/Password is used to authenticate the administrator by the Web administration tool.

7.6 TCP/IP Configuration





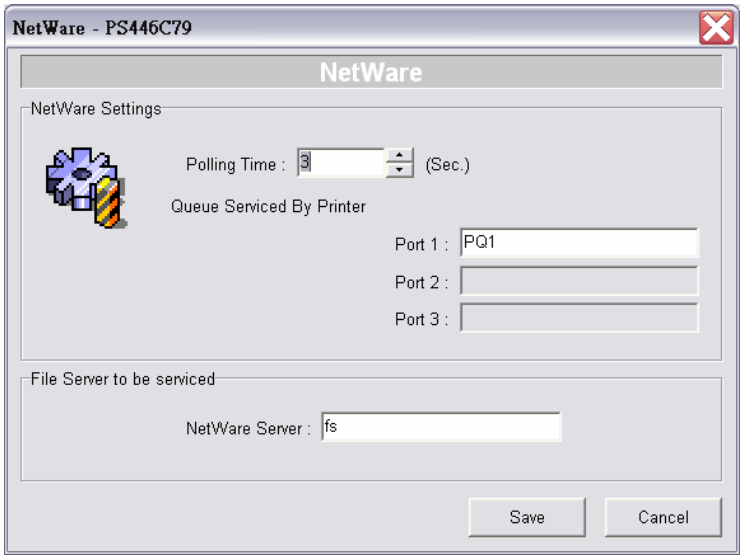
Double-click “TCP/IP” icon and the TCP/IP configuration window will pop up.

You can configure the print server to automatically get IP from DHCP server or manually specify static IP. The print server also has a built-in DHCP server. You can enable this DHCP server and let it manage the IP for you.

Click the “IP” button to enter the IP setting page. If you need the print server to automatically get an IP from the DHCP server, select “Auto IP”. You also can select ‘Static IP” to manually assign “IP Address”, “Subnet Mask” and “Gateway” for the print server.

Click on the “DHCP Server” button to enter the DHCP server’s setting page. You can “Enable/Disable” the DHCP server or set “Auto” and assign a range of IP addresses here. The DHCP server is disabled by default. If Auto is selected, the DHCP server of the print server will be enabled only when there is no other DHCP server within the network. When “Enable” or “Auto” is selected, you have to configure “Starting Address”, “Range”, “Subnet Mask”, “Gateway” and “DNS”. The print server will assign a unique IP for each client.

7.7 NetWare Print Server Configuration



Double-click on “NetWare” icon and the NetWare configuration window will pop up.

This print server supports NetWare Bindery Printing method. The print server periodically polls the NetWare server printer queues from printing jobs. You have to assign the NetWare server name, print server polling interval and the name of queue on the NetWare server for each printer port.

Polling Time is the polling interval of the print server for waiting printing jobs on the NetWare server.

Queue Serviced by Printer is the name of the printer queue on the NetWare server. The printer queue keeps all printing jobs waiting on the NetWare server. You have to assign a printer queue for each printer port of this print server.

NetWare Server is the name of the NetWare file server that provides printer queues.

7.8 AppleTalk Configuration

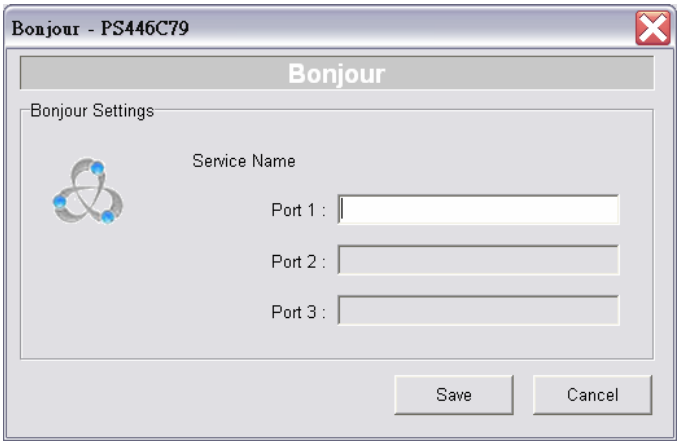
Double-click “AppleTalk” icon and the AppleTalk configuration window will pop up.

AppleTalk is a data communication protocol often used by Macintoshes. The printer server can use these parameters to join the AppleTalk network and share the printer to other AppleTalk workstations. You have to setup the “Zone Name” and “Printer Type” for each printer port of this print server.

Zone Name: Print server has to join zones of AppleTalk before it can be shared to other workstations. Only workstations in the same zone can share the printer. If you want to share the printer to all workstations in all Zones, you should enter only “*” in the “Zone Name” field.

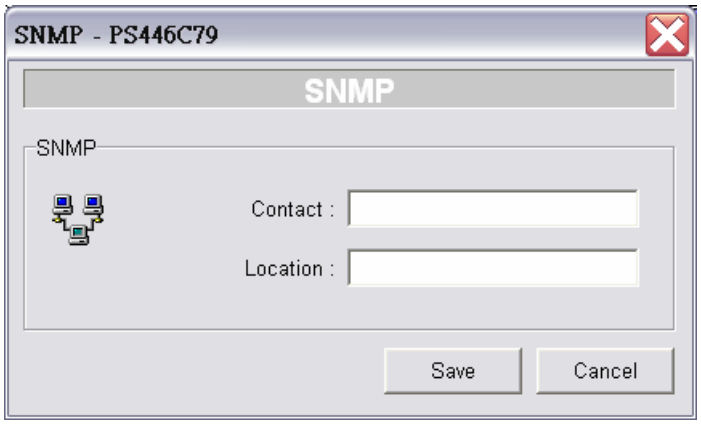
Printer Type, the type of printer attached to each printer port. You can get the printer type from the manufacturer of the printer.

7.9 Bonjour Configuration



Bonjour enables automatic detection of computers, devices and services on the IP network. The service name will be seen by users on the IP network. You have to designate the unique and friendly name to describe the device.

7.10 SNMP Configuration

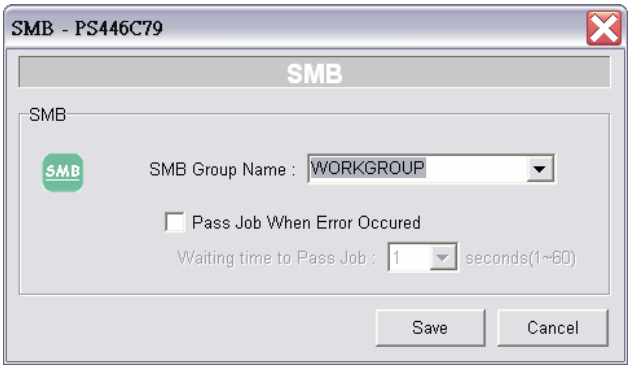


Double-click on “SNMP” icon and the SNMP configuration window will pop up.

Contact: You can enter the print server administrator’s contact information here. This information will be displayed in the SNMP management tool.

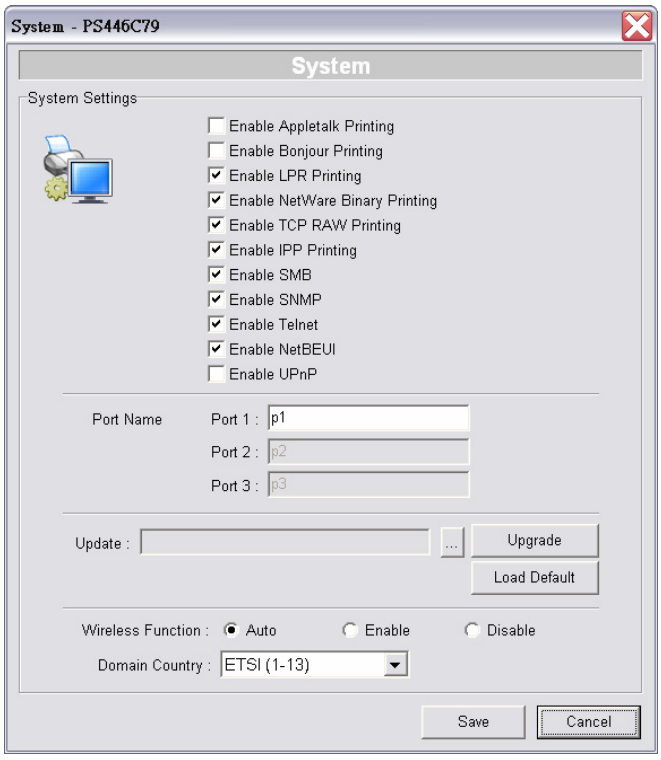
Location: You can enter the installed location of the print server here. This information will be displayed in the SNMP management tool.

7.11 SMB Configuration



SMB Group Name, the name of the SMB group that this print server belongs to. All PCs should join the same group before they can use this print server by SMB protocol.

7.12 System Configuration



Double-click on “System” icon and the System configuration window will pop up.

In the System configuration page, you can select to enable/disable each printing or management protocol, assign name for each printer port of this print server, upgrade the new firmware for this print server, and enable/disable wireless function.

Port Name is the name of the printer port. Each printer port has to be assigned a name. The client utility uses this name to access the printer port.

Upgrade Firmware: You can use this “Upgrade Firmware” tool to update the newest firmware of the print server. Click on the button and select the correct firmware in your PC. After selecting the firmware file, click the “Upgrade” button to finish the firmware update process. If you want to reset the Print Server to default factory settings, please click **Load Default**.

Wireless Function: You can select “Enable” or “Disable” to manually enable or disable the wireless function. If you manually enable wireless function, the print server’s wireless LAN will be always enabled and Ethernet will be always disabled. If you manually disable the wireless function, the print server’s wireless LAN will be always disabled and Ethernet will be always enabled. You can also select “Auto” to let the print server automatically decide whether to enable or disable the wireless function. The print server can only work in either Ethernet or wireless LAN mode. It cannot work in both Ethernet and wireless LAN mode at the same time. When the print server starts up, it will auto-detect if the LAN port is connected to an active network by Ethernet cable when starting up, the print server will run in Ethernet mode. If the print server is not connected to an active network by Ethernet cable when starting up, the print server will run in wireless LAN mode. The print server default is in “Auto” mode.

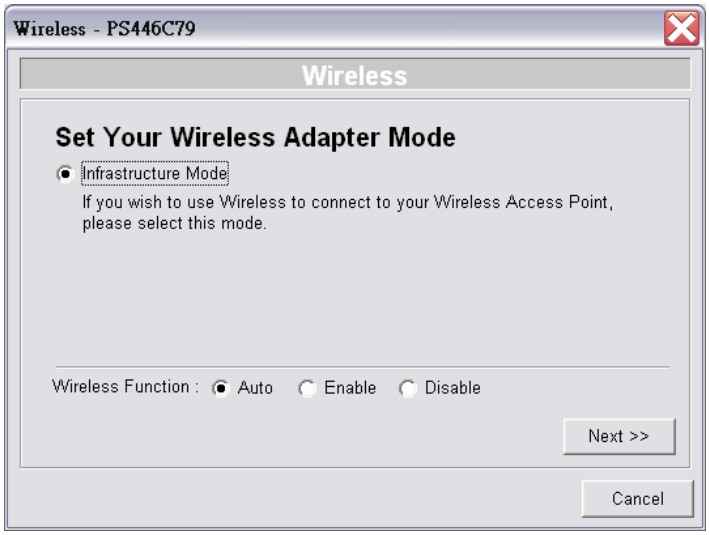
Domain Country: The wireless channels are different from country to country. Generally, the channels are from 1 to 11 in USA and from 1 to 13 in Europe. The operating channel will be set to the print server before importing. If you are in a different country, please make sure that you have set the available channels according to your location.

7.13 Wireless Configuration

If you want to use the print server through wireless LAN, please set up the print server through Ethernet first and make sure your wireless LAN setting is correct. After setting the wireless LAN, unplug the Ethernet cable and restart the print server, then you can start to use the print server through wireless LAN. If the wireless configuration does not work, please plug the Ethernet cable again, restart the print server and configure the print server through Ethernet until the wireless LAN settings are correct.

The default settings of the print server wireless function are as follows:

- Mode: Infrastructure
- SSID: Default
- Channel: 11

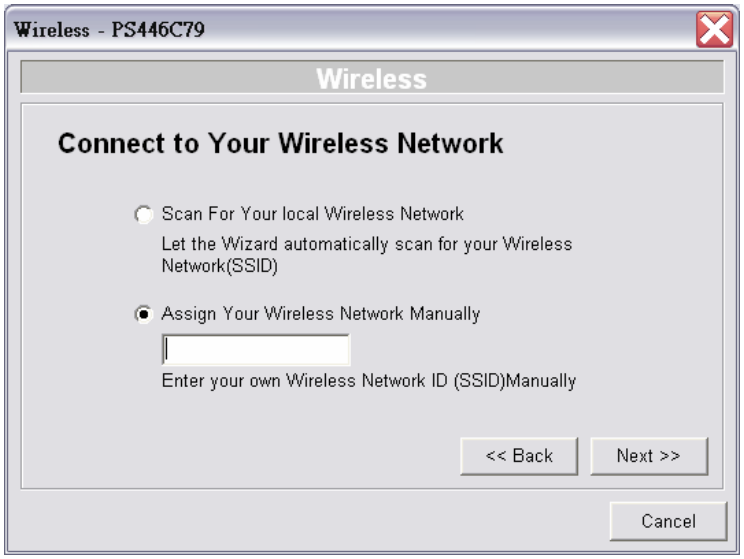

Wireless - PS446C79
Wireless
Set Your Wireless Adapter Mode
Infrastructure Mode
If you wish to use Wireless to connect to your Wireless Access Point, please select this mode.
Wireless Function : Auto Enable Disable
Next >>
Cancel

Double-click on the “Wireless” icon and the wireless configuration window will pop up.

If you use access point to build up wireless network, it will be “Infrastructure Mode”.

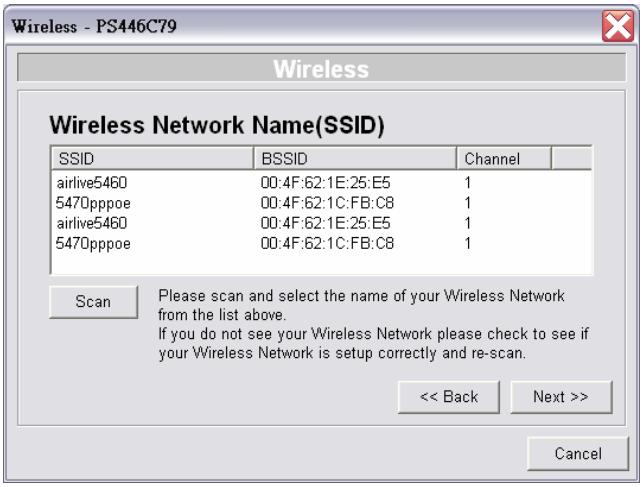
After selecting the operation modes of the wireless function, click **Next** to go to more detailed configuration.

Infrastructure Mode:


Wireless - PS446C79
Wireless
Connect to Your Wireless Network
Scan For Your local Wireless Network
Let the Wizard automatically scan for your Wireless Network(SSID)
Assign Your Wireless Network Manually
Enter your own Wireless Network ID (SSID)Manually
<< Back
Next >>
Cancel

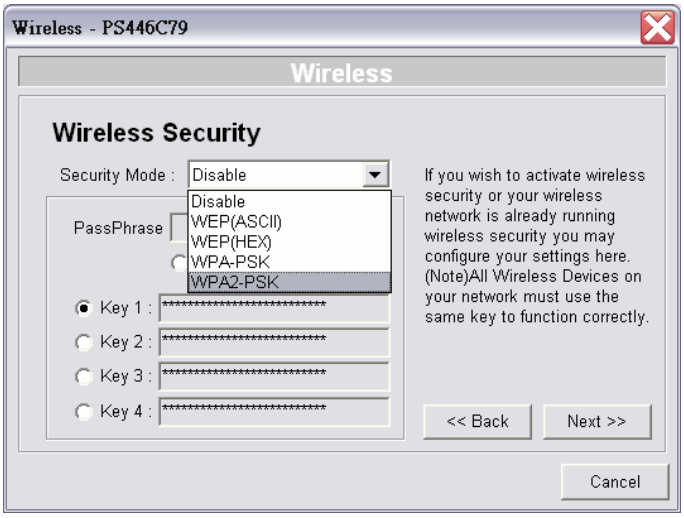
In the Infrastructure mode, you have to let the print server associate with an access point. You let the print server scan for an available access point automatically or manually assign the SSID of the access point you want to use.

If you select to let the print server scan for an available access point, the following window will pop up.



The list is the scanned available access points. Select an access point in the list and click **Next**. If you cannot find the access point that you want to use, click **Scan** to let the print server scan again.

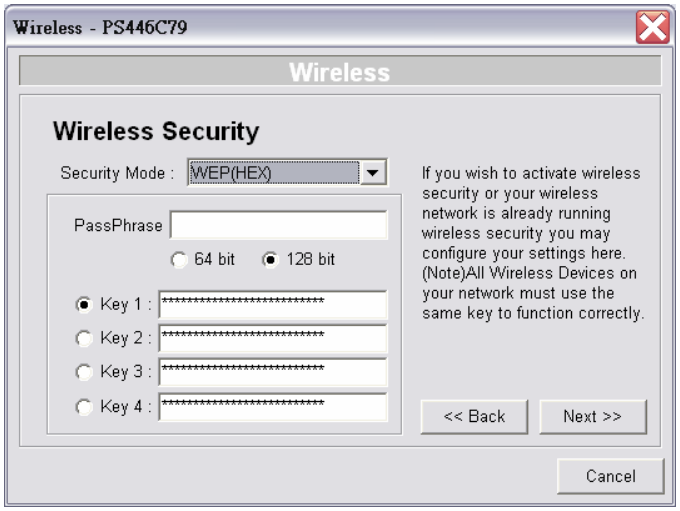
“Infrastructure” mode has to go through the following procedure:



The print server supports WEP, WPA-PSK and WPA2-PSK security mode. If you want to use WEP encryption to protect your wireless network, you have to select “WEP (ASCII)” or “WEP (HEX)”. If you want to use WPA-PSK, you have to select “WPA-PSK”. If you want to use WPA2-PSK, you have to select “WPA2-PSK”. The wireless security setting should be the same with other wireless devices in the same network.

WEP Security Mode

Wireless - PS446C79
Wireless
Wireless Security
Security Mode :
WEP(ASCII)
PassPhrase
64 bit
128 bit
Key 1 :
Key 2 :
Key 3 :
Key 4 :
If you wish to activate wireless security or your wireless network is already running wireless security you may configure your settings here. (Note)All Wireless Devices on your network must use the same key to function correctly.
<< Back
Next >>
Cancel


Wireless - PS446C79
Wireless
Wireless Security
Security Mode :
WEP(HEX)
PassPhrase
64 bit
128 bit
Key 1 :
Key 2 :
Key 3 :
Key 4 :
If you wish to activate wireless security or your wireless network is already running wireless security you may configure your settings here. (Note)All Wireless Devices on your network must use the same key to function correctly.
<< Back
Next >>
Cancel

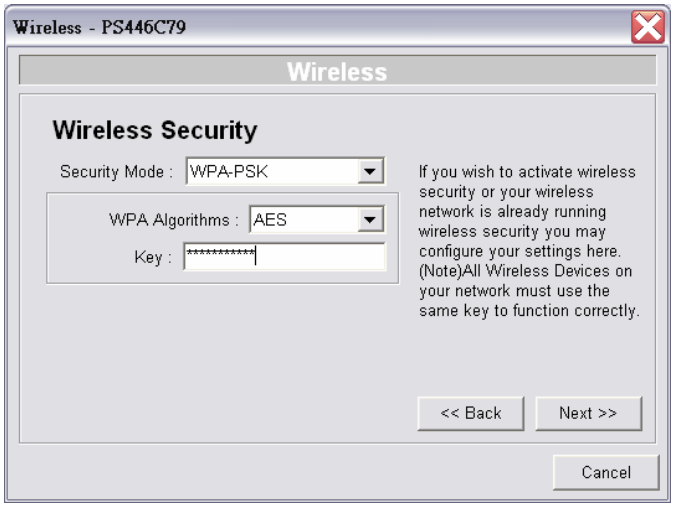
You can select “64 bit” or “128 bit” length and “Hexadecimal” or “ASCII” format for the encryption key. Longer key length can provide stronger security but weak communication performance.

Enter four key values by following the rules below and select one key as the default key.

- Passphrase – A passphrase simplifies the WEP encryption process by automatically generating the WEP encryption keys for the print server. This setting is only valid when the secutrity mode is in “WEP (HEX)”.
- Key 1 to Key 4 – If the key length is 64-bit, enter 10-digit Hex values or 5-digit ASCII values as the encryption keys. For example: “0123456aef” or “Guest”.

  If the key length is 128-bit, enter 26-digit Hex values or 13-digit ASCII values as the encryption keys. For example, “01234567890123456789abcdef” or “administrator”.

WPA-PSK Mode:


Wireless - PS446C79
Wireless
Wireless Security
Security Mode : WPA-PSK
WPA Algorithms : AES
Key : **********
If you wish to activate wireless security or your wireless network is already running wireless security you may configure your settings here. (Note)All Wireless Devices on your network must use the same key to function correctly.
<< Back
Next >>
Cancel

"WPA-PSK" requires users to select the advanced encryption methods, i.e. TKIP or AES and enter a set of shared key.

- TKIP – TKIP (Temporal Key Integrity Protocol) changes the temporal key every 10,000 packets. This insures much greater security than the standard WEP security.
- AES – AES has been developed to ensure the highest degree of security and authenticity for digital information and it is the most advanced solution defined by IEEE 802.11i for the security in the wireless network.
- Pre-shared Key Format – Select "Passphrase" or "Hex" key format. If "Passphrase" is selected, please enter 8 to 63 digits of ASCII format to be the key for the authentication within the network. If "Hex" is selected, please enter 64 digits of Hex code which should be "0-9" and "A-F".

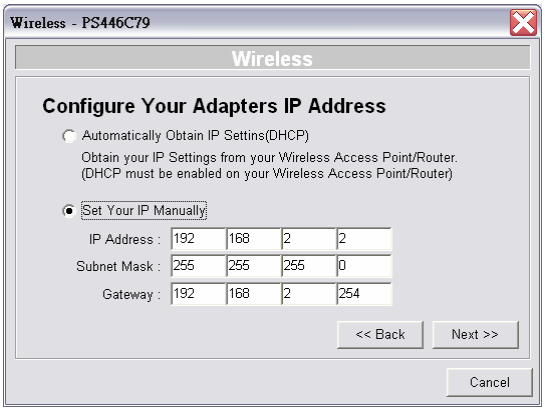
WPA2-PSK Mode:

Wireless - PS446C79
Wireless
Wireless Security
Security Mode : WPA2-PSK
WPA Algorithms : AES
Key : **********
If you wish to activate wireless security or your wireless network is already running wireless security you may configure your settings here. (Note)All Wireless Devices on your network must use the same key to function correctly.
<< Back
Next >>
Cancel

“WPA2-PSK” requires users to select the advanced encryption methods, i.e. TKIP or AES and enter a set of shared key.

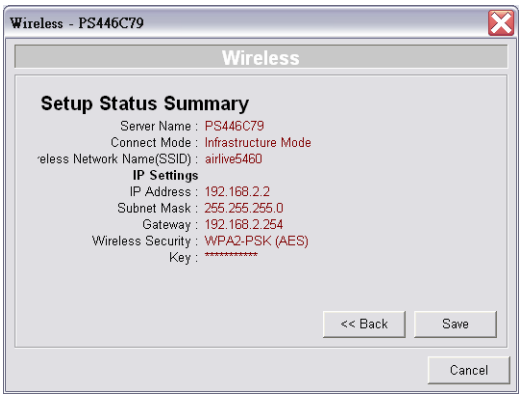
- AES – AES has been developed to ensure the highest degree of security and authenticity for digital information and it is the most advanced solution defined by IEEE 802.11i for the security in the wireless network.
- Key – Enter 8 to 63 digits of ASCII format to be the key for the authentication within the network.

When you finish configuring the wireless security, click **Next** to go to the next step.


Wireless - PS446C79
Wireless
Configure Your Adapters IP Address
Automatically Obtain IP Settins(DHCP)
Obtain your IP Settings from your Wireless Access Point/Router.
(DHCP must be enabled on your Wireless Access Point/Router)
Set Your IP Manually
IP Address : 192 168 2 2
Subnet Mask : 255 255 255 0
Gateway : 192 168 2 254
<< Back
Next >>
Cancel

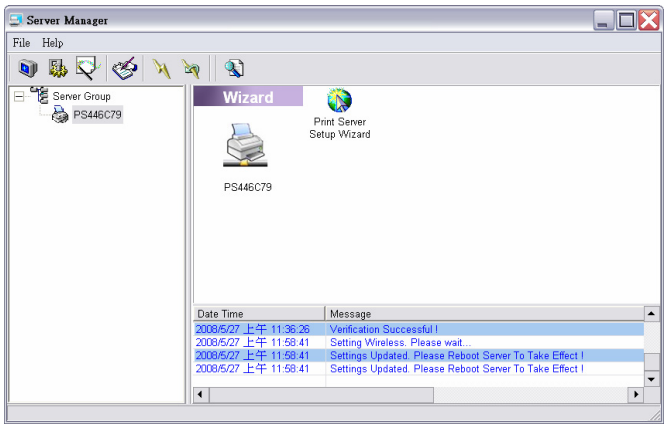
You can select to let the print server automatically obtain IP settings with DHCP client or manually assign the IP settings.

If you manually assign the IP settings, you have to enter IP address, subnet mask and default gateway address.
When you finish configuring the IP settings, click **Next** to confirm the IP address configuration.



Click **Save** to save the wireless configuration.

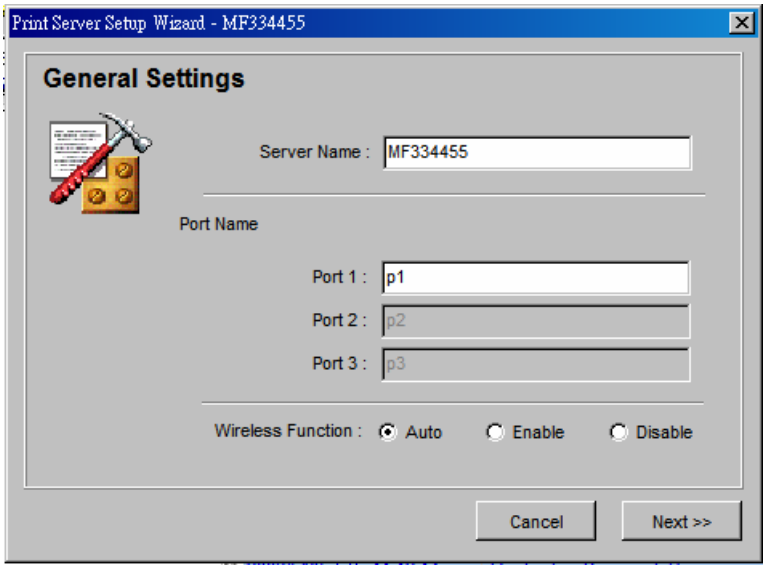
7.14 Wizard



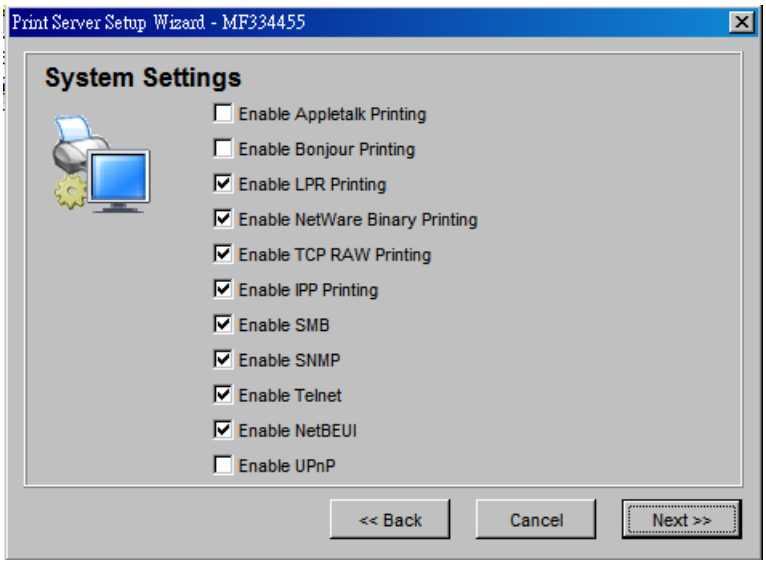
Click on the “Wizard” icon on the tool bar, the setup wizard item of the current selected print server will be shown on the right side of the window.

Double-click the “Print Server Setup Wizard” and the setup wizard will guide you through all the setup process.

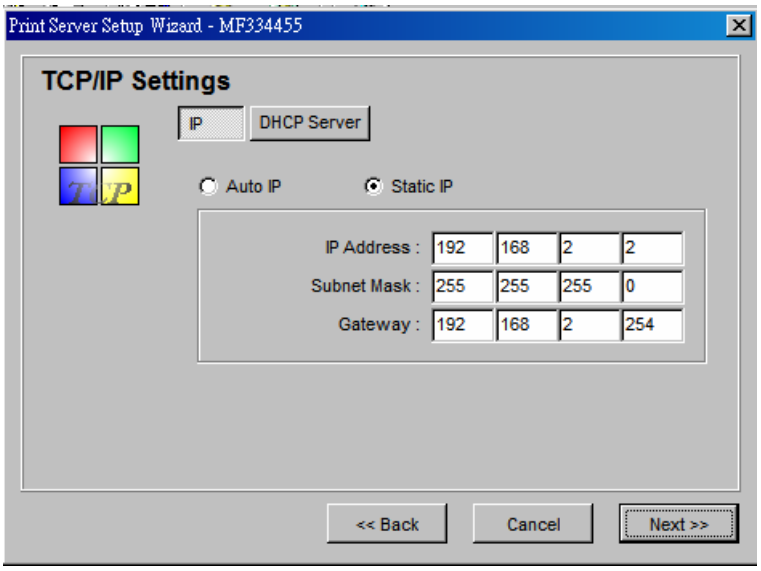
Step 1: Set up the name of this print server, the port name for the print server and select to enable or disable the wireless function.



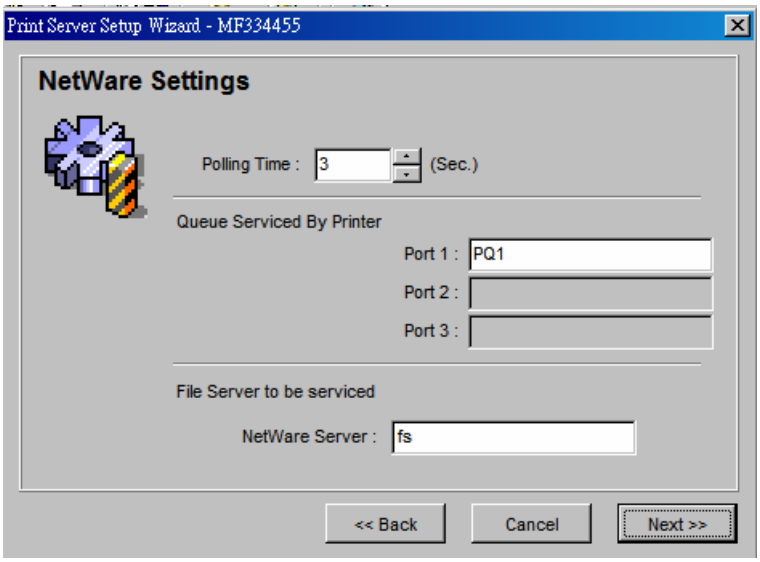
Step 2: Select to enable required printing protocol. Please refer to Section 7.12 for detailed information.



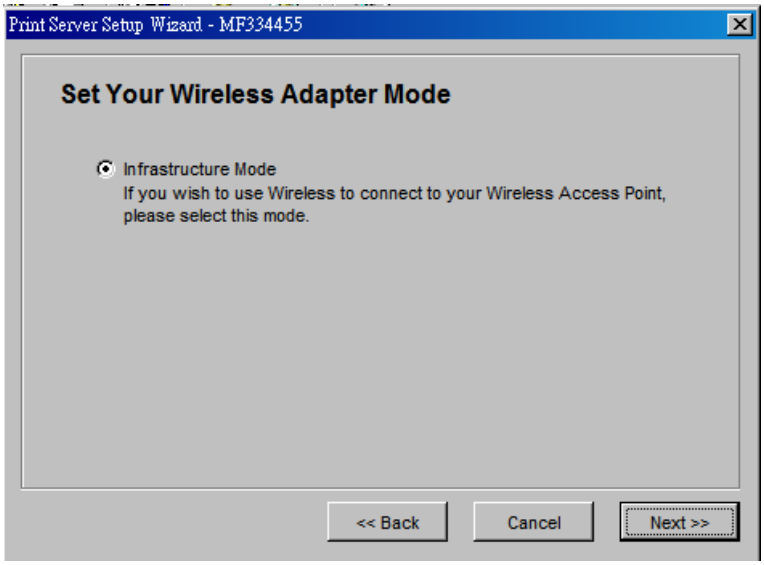
Step 3: Setup the IP of this print server and the DHCP server. Please refer to Section 7.6 for detailed information.



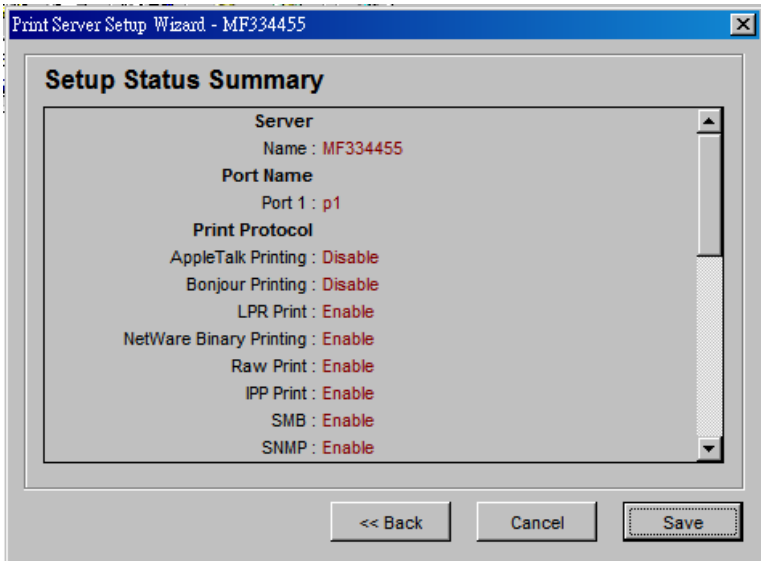
Step 4: Setup the NetWare printing. Please refer to Section 7.7 for detailed information.



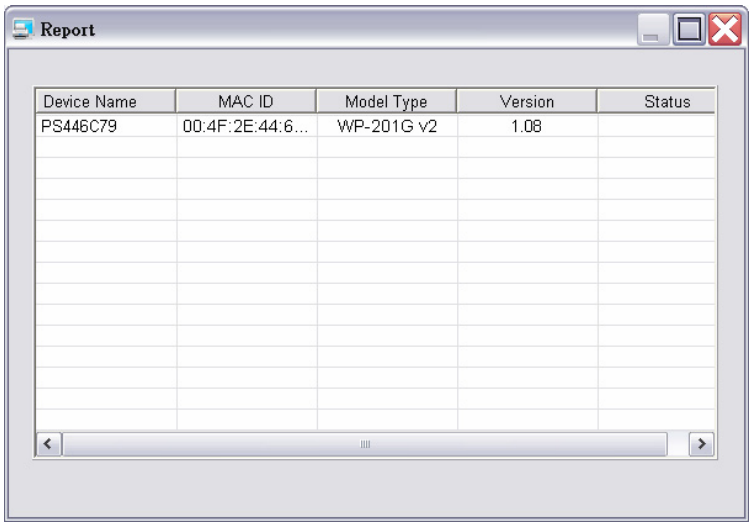
Step 5: Select the Wireless Adapter mode and complete wireless LAN settings. The other procedures are the same with “Wireless” Setting in “Setup” screen. Please refer to Section 7.13 for more detailed information.


Print Server Setup Wizard - MF334455
Set Your Wireless Adapter Mode
Infrastructure Mode
If you wish to use Wireless to connect to your Wireless Access Point, please select this mode.
<< Back
Cancel
Next >>

Step 6: Click **Save** to finish setting.



7.15 Report



Click “Report” icon on the tool bar, the Report window will pop up.

The report lists basic information of all available print servers on the network. The information includes Device Name, MAC ID, Model Type, Firmware Version and Status of print server.

Chapter 8: Web Management

8.1 Introduction

Print server can be configured and managed on the Web. Through Local Area Network, or even the Internet, administrator can easily configure and manage print server's various main functions in browsers. Simply enter print server's IP address into your browser's address field to manage a print server by print server's built-in Web Server.

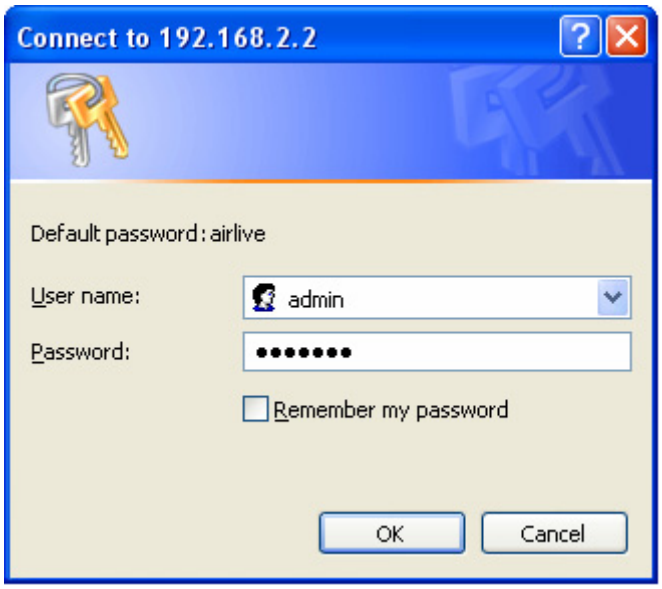
The default IP address, User Name and Password settings of the print server are as follows:

IP address: 192.168.2.2
User Name: admin
Password: airlive

8.2 Login

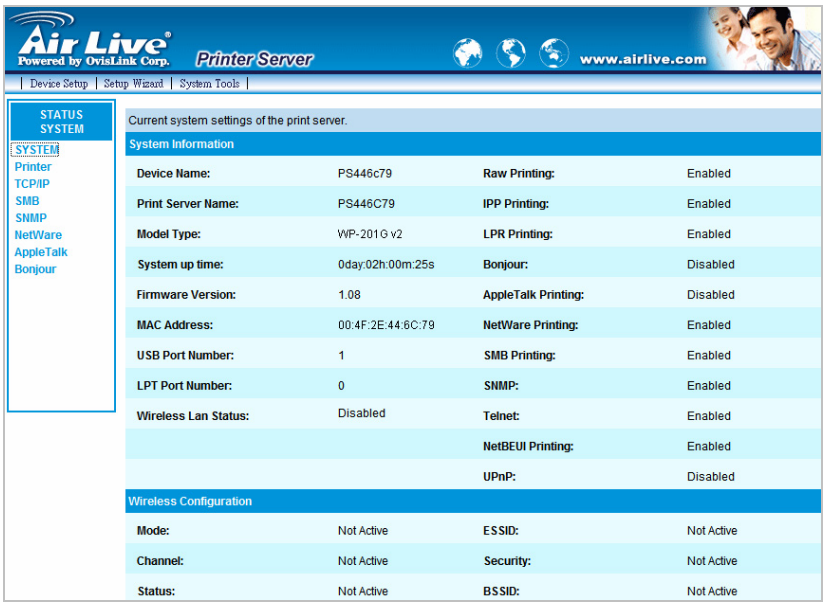
You may use any web browser to review the status or configure the settings of the print server. After entering the IP address of the print server, a login page will display. You have to enter the correct "User Name" and "Password" before going to the Web Management pages.

Note: Default User Name is "admin"; default password is "airlive".



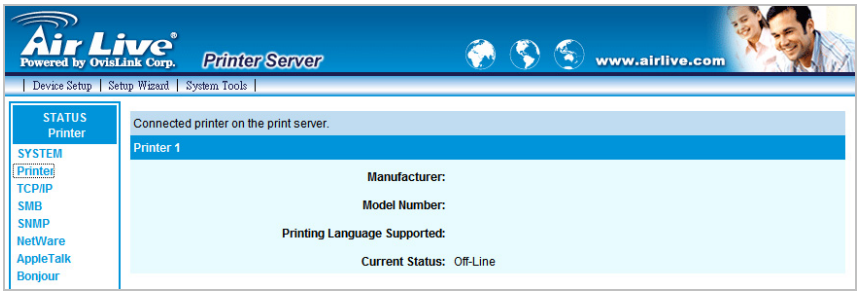
8.3 Device Status

8.3.1 System



System Information includes “Device Name”, “Print Server Name”, “Model Type”, “System Up Time”, “Firmware Version”, “MAC Address”, and the protocols enabled status, etc.

8.3.2 Printer

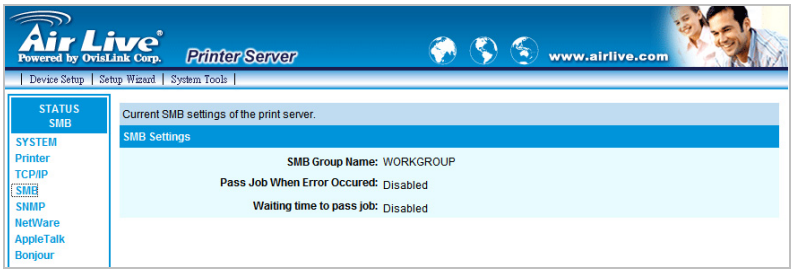


This page lists information of printer connected to the printer port.

8.3.3 TCP/IP

This page lists all TCP/IP settings of the print server including “IP Address”, “Subnet Mask” and “Gateway”. It also lists DHCP server setting.

8.3.4 SMB

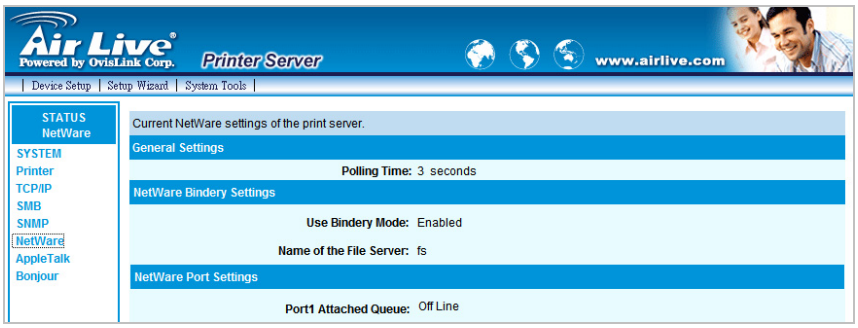


This page lists the SMB group setting of the print server.

8.3.5 SNMP

This page lists the SNMP settings of the print server. It includes the settings of “SNMP System Contact” and “SNMP System Location”.

8.3.6 NetWare

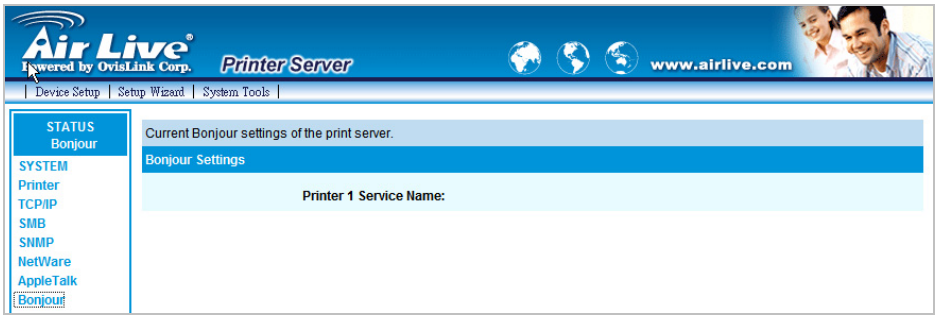


The page lists NetWare settings, including “Polling Time”, “Use Bindery Mode”, “Name of the File Server” and “Port Attached Queue”.

8.3.7 AppleTalk

This page lists AppleTalk settings, including “AppleTalk Zone Name” and “Printer Type” of printers connected to all print ports.

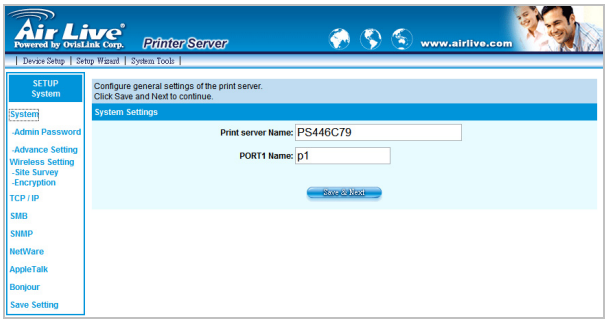
8.3.8 Bonjour



This page lists Bonjour settings, including “Port Service Name” of each port.

8.4 Setup Wizard

8.4.1 System

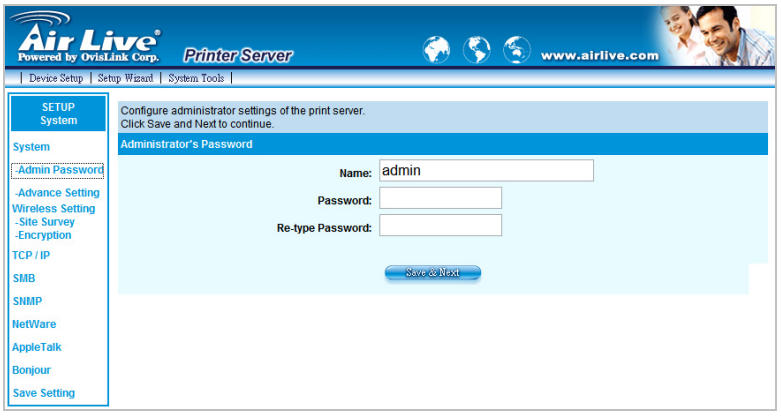


You can change the print server name and port name of the print server from here:

Print Server Name, the name of the print server. You can use this name to identify the print server when you are searching for the print server by the administration and client utilities.

Port Name is the name of the printer port. Each printer port has to be assigned a name. Then you can use this name to access the printer port.

8.4.1.1 Admin Password



It allows you to change the password of the print server.

USER Name, the administrator name of the print server. If you change the user name, you have to login to the print server from administrator utility or web management with the new name. The default user name is “admin”

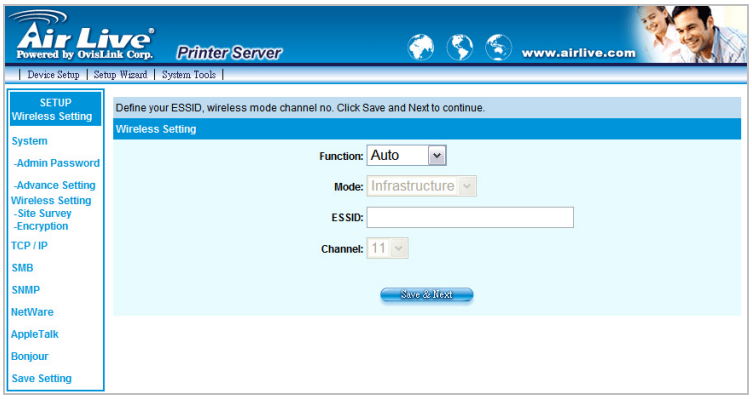
Password, enter the password you want to change to the print server. The password can be up to 8-digit alphanumeric format. The default password is “airlive”.

Re-type Password, enter the password you want to change to the print server again.

8.4.1.2 Advanced Settings

You can enable/disable the printing protocols from the screen. To enable the function, select **Enable**; to disable the function, select **Disable**.

8.4.2 Wireless



If you want to use the print server through wireless LAN, please set up the print server through Ethernet first and make sure the wireless LAN setting is correct. After setting the wireless LAN, unplug the Ethernet cable and restart the print server, then you can start to use the print server through wireless LAN. If the wireless configuration does not work, please plug the Ethernet cable again, restart the print server and configure the print server through the Ethernet until the wireless LAN settings are correct.

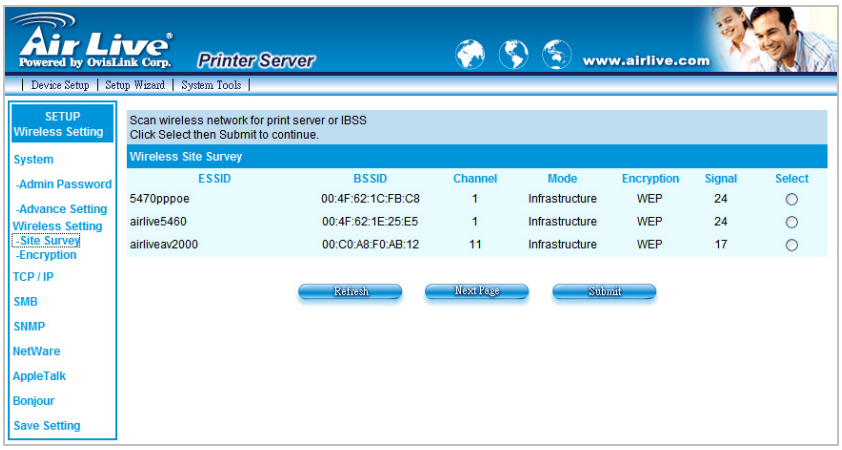
You can set parameters that are used for the wireless stations to connect to this print server. The parameters include “Function” and “ESSID”. You can manually set the parameters of wireless LAN in this page or use the “Site Survey” function to automatically search for an available access point and associate with it.

Mode is the operation mode of wireless station. You need to have an access point as the wireless LAN infrastructure, the wireless mode is “Infrastructure” mode.

ESSID is the unique name identified by in a wireless LAN. The ID prevents the unintentional merging of two co-located WLANs. Please make sure that the ESSID of all stations and access points in the same WLAN network are the same.

Channel Number is the channel number of your wireless LAN. The channel number is fixed to number “11”.

8.4.2.1 Site Survey

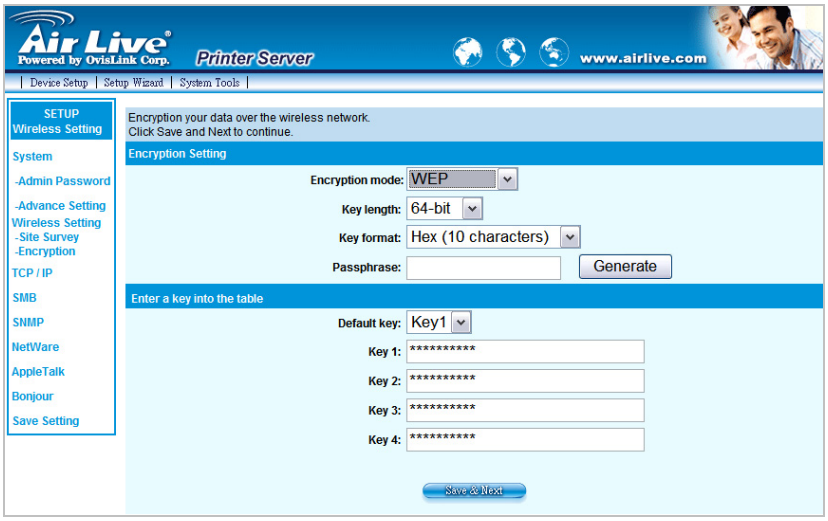


You can use this “Site Survey” function to search for available access points in your location. In the list is the information of all available access points or wireless stations, including SSID, BSSID, Channel, Type, Encryption and Signal Strength. You can select one wireless device in the list for this print server to associate with.

8.4.2.2 Encryption

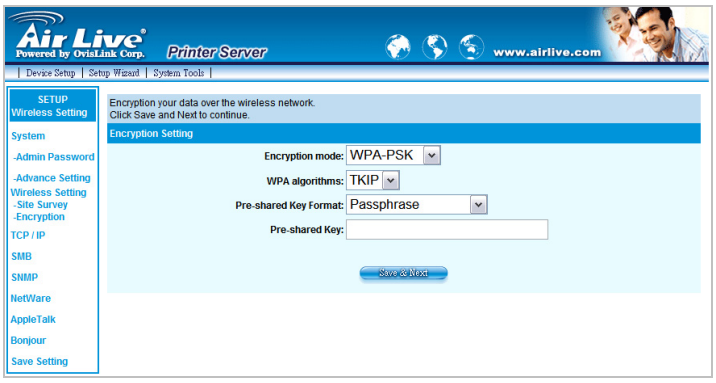
This print server supports WEP, WPA-PSK, and WPA2-PSK security mode. If you want to use WEP encryption to protect your wireless network, you have to select “WEP”. If you want to use WPA-PSK, you have to select “WPA-PSK”. If you want to use WPA2-PSK, you have to select “WPA2-PSK”. The wireless security setting should be the same with other wireless devices in the same network.

WEP Security Mode



- Key Length – You can choose “64-bit” to use WEP with 64-bit key length encryption or choose “128-bit” to use WEP with 128-bit key length encryption. The longer key length can provide better security but worse transmission throughput.
- Key Format – You may select to use ASCII Characters (alphanumeric format) or Hexadecimal digits (in the “A-F”, “a-f” and “0-9” range) to be the WEP Key.
- Passphrase – A passphrase simplifies the WEP encryption process by automatically generating the WEP encryption keys for the print server.
- Default Key – Select one of the four keys to encrypt the data. Only the key you select it in the “Default key” will take effect.
- Key 1 – Key 4 – The WEP keys are used to encrypt data transmitted within the wireless network. Fill the text box by following the rules below.
- 64-bit WEP: input 10-digit Hex values (in the “A-F”, “a-f” and “0-9” range) or 10-digit ASCII characters as the encryption keys. For example: “0123456789012345678 9abcdef” or “administrator”.

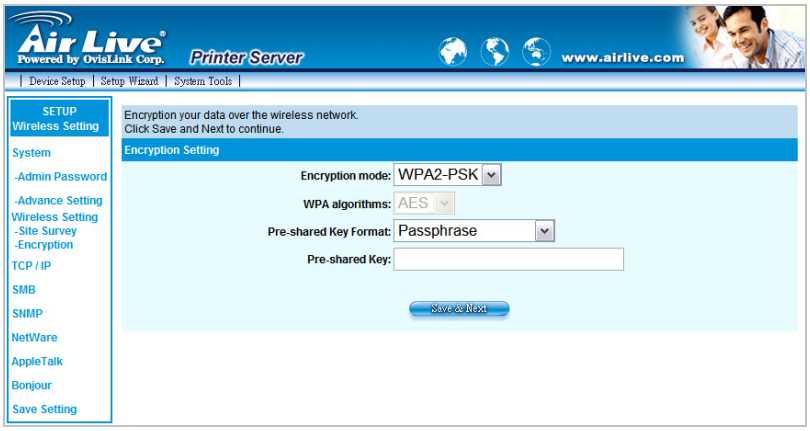
WPA-PSK Security Mode



“WPA-PSK” requires users to select one of the advanced encryption methods, i.e. TKIP or AES and enter a set of shared key.

- TKIP – TKIP (Temporal Key Integrity Protocol) changes the temporal key every 10,000 packets. This insures much greater security than the standard WEP security.
- AES – AES has been developed to ensure the highest degree of security and authenticity for digital information and it is the most advanced solution defined by IEEE 802.11i for the security in the wireless network.
- Pre-shared Key Format – Select “Passphrase” or “Hex” key format. If “Passphrase” is selected, please enter 8 to 63 digits of ASCII format to be the key for the authentication within the network. If “Hex” is selected, please enter 64 digits of Hex code which should be “0-9” and “A-F”.
- Pre-Shared Key – The ‘Pre-Shared Key” is different from the key format selection. Please see above description.

WPA2-PSK Security Mode

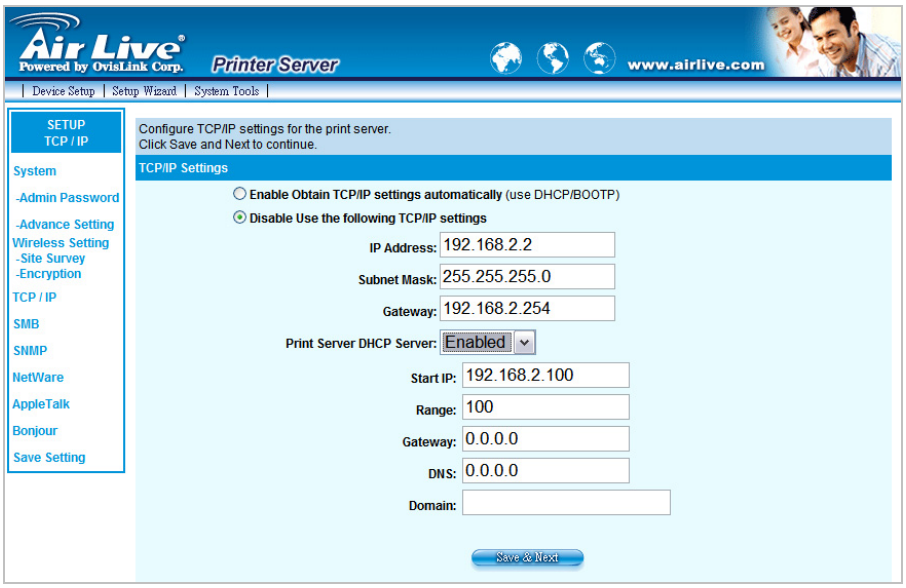


"WPA2-PSK" requires users to enter shared key with AES algorithms only.

- AES – AES has been developed to ensure the highest degree of security and authenticity for digital information and it is the most advanced solution defined by IEEE 802.11i for the security in the wireless network.
- Pre-shared Key Format – Select "Passphrase" or "Hex" key format. If "Passphrase" is selected, please enter 8 to 63 digits of ASCII format to be the key for the authentication within the network. If "Hex" is selected, please enter 64 digits of Hex code which should be "0-9" and "A-F".

When you finish configuring the wireless security, click "**Save & Next**" to confirm the configuration.

8.4.3 TCP/IP

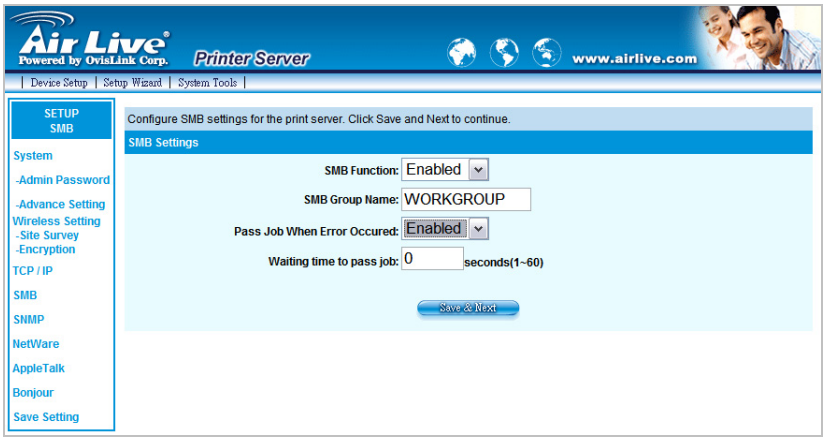


You can configure the print server to automatically get IP from DHCP server or manually specify static IP. The print server also has a built-in DHCP server. You can enable this DHCP server and let it manage IP for you.

If you need the print server to automatically get an IP from DHCP server, select “Enable Obtain TCP/IP Settings Automatically (Use DHCP/BOOTP)”. You can also select “Disable Use the following TCP/IP Settings” to manually assign “IP Address”, “Subnet Mask” and “Gateway” for the print server.

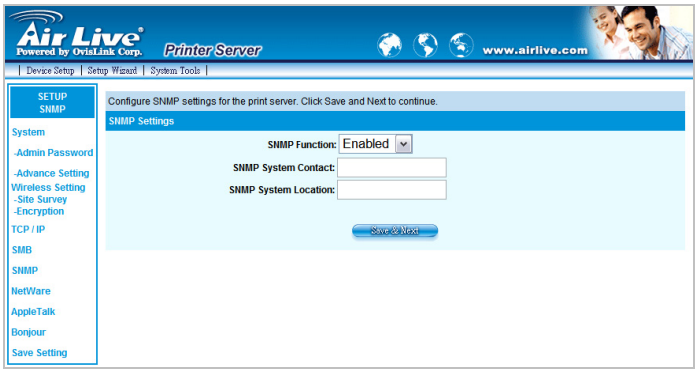
You can enable/disable or set auto for the print server’s DHCP server. The DHCP server is disabled by default. If the DHCP server is enabled or set to Auto, you have to assign a range o IP addresses here. Fill in the “Start IP”, “Range”, “DNS”, “Subnet Mask” and “Gateway”, and the print server will assign a unique IP for each client. Note that when “Auto” is selected, the DHCP server of the print server will be enabled only when there is no other DHCP server within the network.

8.4.4 SMB



You can enable/disable the SMB protocol from here. If SMB is enabled, enter the “SMB Group Name” to specify the SMB group that this print server belongs to. All PCs should join the same group before they can use this print server by SMB protocol. Furthermore you can enable “Pass Job When Error Occurred” function and enter name length 1-60 seconds in “Waiting time to pass job”.

8.4.5 SNMP

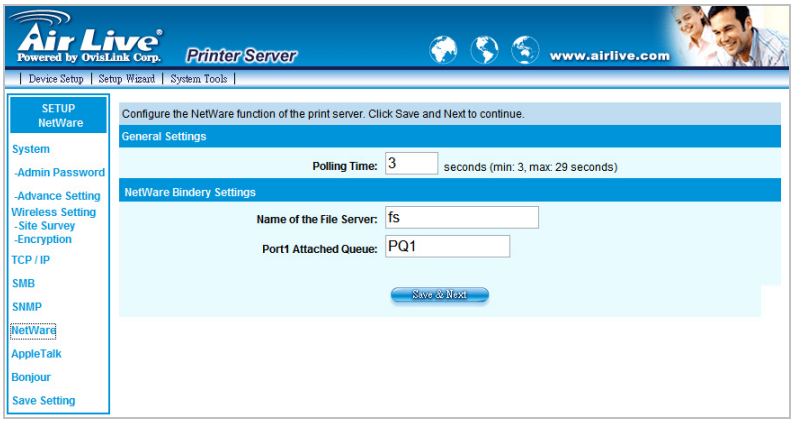


The print server supports SNMP configuration. If it is enabled, please set up the following parameters.

SNMP System Contact: You can enter the print server administrator’s contact information here. This information will be displayed in the SNMP management tool.

SNMP System Location: You can enter the installed location of the print server here. This information will be displayed in the SNMP management tool.

8.4.6 NetWare



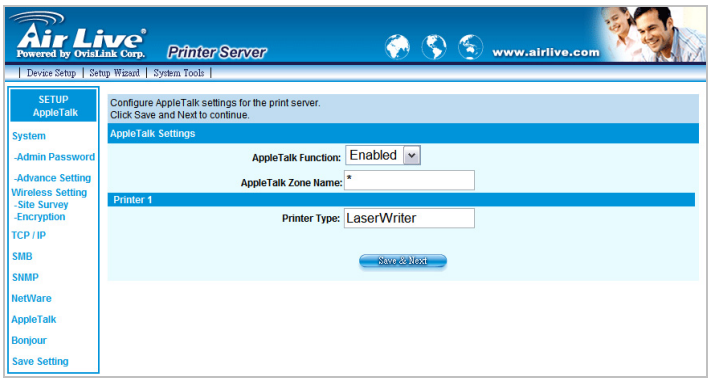
This print server supports NetWare Bindery Printing method. The print server periodically polls the NetWare server printer queues from printing jobs. You have to assign the NetWare server name, print server polling interval and the name of queue on the NetWare server for each printer port.

Polling Time is the polling interval of the print server for waiting printing jobs on the NetWare server.

Name of the File Server is the name of the NetWare file server that provides printer queues.

Attached Queue is the name of the printer queue on the NetWare server. The printer queue keeps all printing jobs waiting on the NetWare server. You have to assign a printer queue for each port of this print server.

8.4.7 AppleTalk



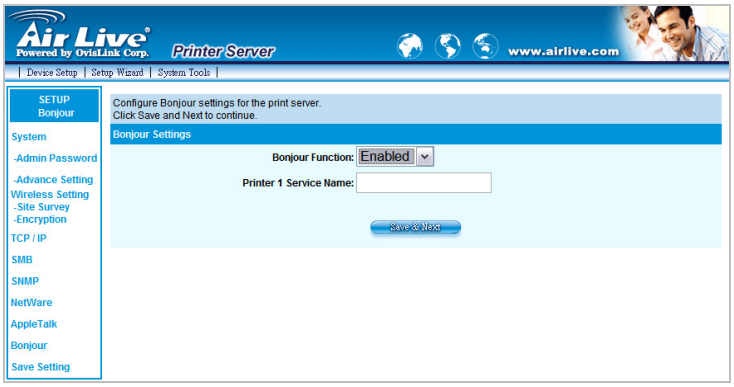
AppleTalk is a data communication protocol often used by Macintoshes. The print server can use these parameters to join the AppleTalk network and share the printer to other AppleTalk workstations. You have to select to enable or disable AppleTalk, and setup the “Zone Name” and “Printer Type” for each printer port of this print server.

AppleTalk Enable: Enable or disable “AppleTalk”.

AppleTalk Zone Name: Print server has to join zones of AppleTalk before it can be shared to other workstations. Only workstations in the same zone can share the printer. If you want to share the printer to all workstations in all Zones, you should enter only “*” in the “Zone Name” field.

Printer Type, the type of printer attached to each printer port. You can get the printer type from the manufacturer of the printer.

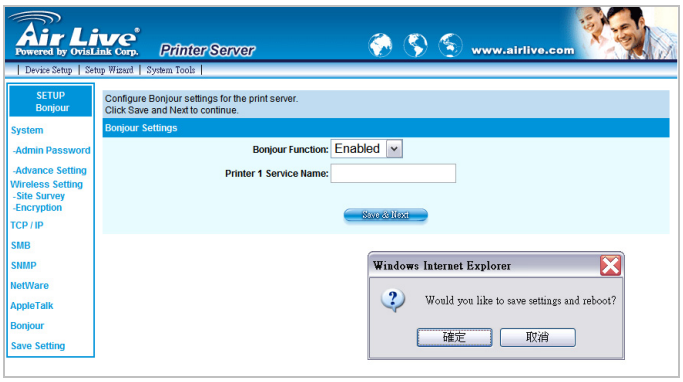
8.4.8 Bonjour



Bonjour enables automatic discovery of computers, devices and services on IP network. The service name will be seen by users on IP network. You have to designate the unique and friendly name to describe the

device.

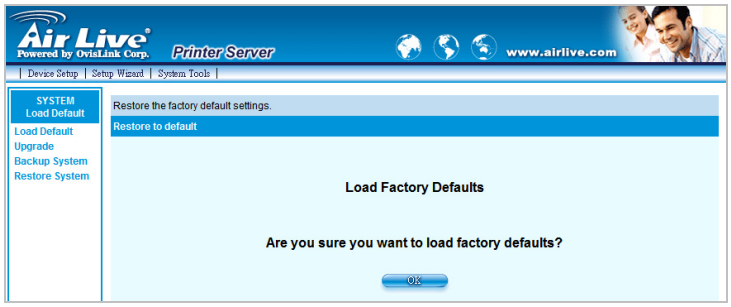
8.4.9 Save Settings



You can click “**Save Settings**” to save the settings and restart the system.

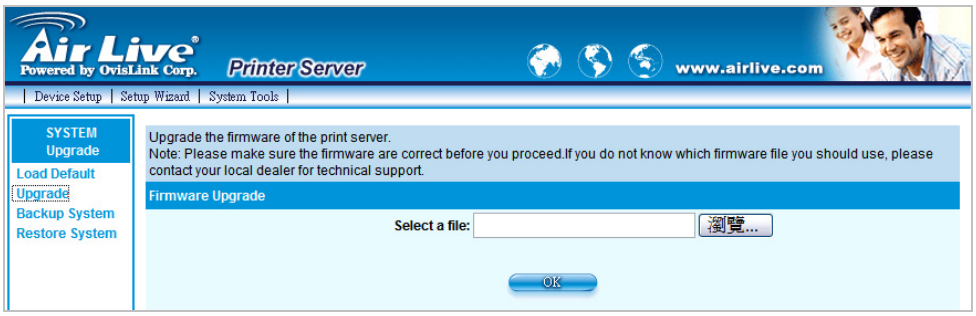
8.5 System Tools

8.5.1 Load Default



You can use this page to restore the factory default settings. All of your previous setup will be cleared.

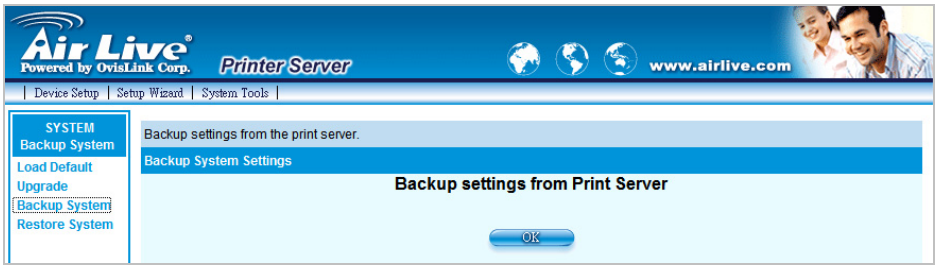
8.5.2 Upgrade Firmware from Browser


Air Live
Powered by OvisLink Corp.
Printer Server
www.airlive.com
Device Setup | Setup Wizard | System Tools
SYSTEM
Upgrade
Load Default
Upgrade
Backup System
Restore System
Upgrade the firmware of the print server.
Note: Please make sure the firmware are correct before you proceed.If you do not know which firmware file you should use, please contact your local dealer for technical support.
Firmware Upgrade
Select a file:
瀏覽...
OK

You can upgrade new firmware for this print server in this page. Click **Browse** to select the new firmware in your storage and then click **OK**, the firmware will be updated in several minutes.

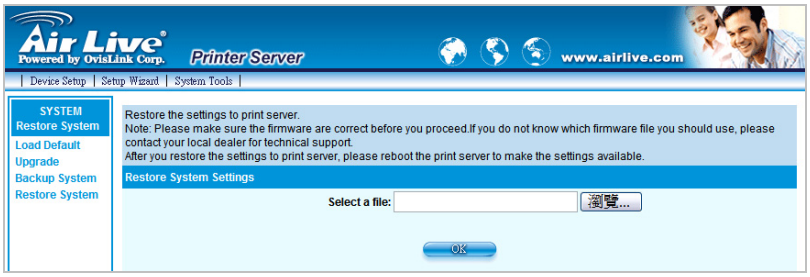
Be aware that if you have started upgrading firmware, you have to follow all the upgrading steps or the print server can't turn back to normal configuration.

8.5.3 Backup Setting



To backup the print server setting to a "config.bin" file, select "Backup settings from Print Server".

8.5.4 Restore System


Air Live
Powered by OvisLink Corp.
Printer Server
www.airlive.com
Device Setup | Setup Wizard | System Tools
SYSTEM
Restore System
Load Default
Upgrade
Backup System
Restore System
Restore the settings to print server.
Note: Please make sure the firmware are correct before you proceed.If you do not know which firmware file you should use, please contact your local dealer for technical support.
After you restore the settings to print server, please reboot the print server to make the settings available.
Restore System Settings
Select a file:
瀏覽...
OK

To apply the setting from the backup file, select "Restore settings from file" and specify a file to restore.

Chapter 9: Telnet Management

9.1 Introduction

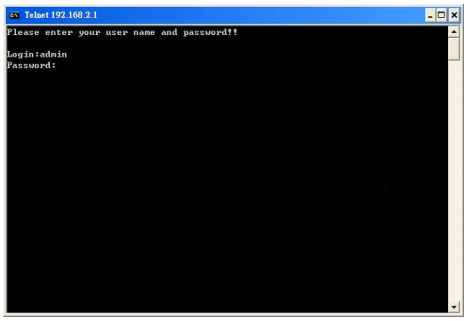
Print server can be configured and managed by Telnet. Through Local Area Network, or even Internet, administrator can easily configure and manage print server's various main functions by a telnet client.

9.2 Login

Execute the Telnet client tool and connect to the print server IP.

telnet 192.168.2.2

Then you will be prompted to enter the username and password.



After you successfully enter the correct username and password, the following prompt will be displayed and you can start to manage this print server by command.

Admin#

9.3 Get Setting Values – "get" Command

"get" command is used to get the setting values of this print server. The format of "get" command is as follows:

Get argument

Then the argument value will be displayed after the command. For example, if I want to get IP address of the print server, I type "get ip" command and the IP value "IP_ADDR='192.168.2.2'" is displayed:

admin# get ip

IP_ADDR='192.168.2.2'

If you enter "get" only, the system will list all available arguments of "get" command.

The following table lists all the arguments whose value can be obtained by the "get" command:

Argument	Description	Example
psname	Print server name	admin# get psname PORT1_PS='PS254896'
password	Login password	admin# get password USER_PASSWORD='1234'
username	Login username	admin# get username USER_NAME='admin'
wlfunc	Wireless LAN function is enabled or disabled 0: disabled 1: enabled 2: auto	admin# get wlfunc WIRELESS_FUNCTION=2
wlmode	Wireless LAN mode is Infrastructure 0: Infrastructure	admin# get wlmode AP_MODE=1
ESSID	ESSID of the wireless LAN	admin# get ESSID SSID='default'

Argument	Description	Example
channel	Channel number used by wireless LAN	admin# get channel CHANNEL=11
wep	The mode of WEP 0: disable 1: 64 bit WEP enabled 2: 128 bit WEP enabled	admin# get wep WEP=0
defkey	Default WEP key number 0: key 1 1: key 2 2: key 3 3: key 4	admin# get defkey WEP_DEFAULT_KEY=0
key641	64 bit WEP key 1	admin# get key641 WEP64_KEY1=0123456789
key642	64 bit WEP key 2	admin# get key641

		WEP64_KEY2=0123456789
key643	64 bit WEP key 3	admin# get key641 WEP64_KEY3=0123456789
key644	64 bit WEP key 4	admin# get key641 WEP64_KEY4=0123456789
key1281	128 bit WEP key 1	admin# get key1281 WEP128_KEY1=0123456789 abcdef0123456789a
key1282	128 bit WEP key 2	admin# get key1282 WEP128_KEY2=0123456789 abcdef0123456789a
key1283	128 bit WEP key 3	admin# get key1283 WEP128_KEY3=0123456789 abcdef0123456789a
key1284	128 bit WEP key 4	admin# get key1284 WEP128_KEY4=0123456789 abcdef0123456789a
ip	IP of the print server	admin# get ip AP_ADDR='192.168.2.2'
gateway	Default gateway of the print server	admin# get gateway DEFAULT_GATEWAY='192.168.2.254'
submask	Subnet mask of the print server	admin# get submask SUBNET_MASK='255.255.255.0'
polling	Polling interval (in second) of the print server for waiting printing jobs on the NetWare server	admin# get polling PORT1_POLLTIME=3
aq1	Name of the printer queue on the NetWare server	admin# get aq1 PORT1_QNAME='PQ1'
applezone	The name of AppleTalk zone that this print server joins to	admin# get applezone PORT1_APPLEAONE='*'
printertype1	The type of the printer attached to this print server	admin# get printertype1 PORT1_PRINTTYPE='LaserWriter'

Argument	Description	Example
SMBDG	The name of the SMB group name that this print server joins to	admin# get SMBDG SMBD_NAME='default'
SNMPC	The administrator contact information of this print server for SNMP	admin# get SNMPC SNMP_CONTACT='sbdjohn@hotmail.com'
SNMPL	The installed location of this print server for SNMP	admin# get SNMPL SNMP_LOCATION='Room 301'
port1	The port name of this print server	admin# get port1 PORT1_LPTNAME='p1'
DHCPS	The DHCP server is enabled or disabled 0: disable 1: enable	admin# get DHCPS DHCPD=0
DHCP	Get dynamic IP by DHCP is enabled or disabled 0: disable 1: enable	admin# get DHCP DYNAMIC_IP=0
appletalk	AppleTalk printing is enabled or disabled 0: disable 1: enable	admin# get appletalk APPLE_ENABLE=0
SMBD	SMB printing is enabled or disabled 0: disable 1: enable	admin# get SMBD SMBD_ENABLE=1
SNMP	SNMP management protocol is enabled or disabled 0: disable 1: enable	admin# get SNMP SNMP_ENABLE=1
IPX	NetWare Bindery printing is enabled or disabled 0: disable 1: enable	admin# get IPX IPX_ENABLE=1
LPD	LPR printing is enabled or disabled 0: disable	admin# get LPD LPD_ENABLE=1

	1: enable	
IPP	IPP printing is enabled or disabled 0: disable 1: enable	admin# get IPP IPP_ENABLE=1
RAW	RAW printing is enabled or disabled 0: disable 1: enable	admin# get RAW RAW_ENABLE=1

9.4 Modify Setting Values – “set” Command

“set” command is used to modify the setting values of this print server. The format of “set” command is as follows:

set argument_name value

Then the value will be written into the system configuration. For example, if you want to set IP address of the print server to 192.168.2.2, type “set ip 192.168.2.2” command and the IP of the print server will be changed. After the setting is finished, please reboot the print server.

admin# set ip 192.8.2.2
admin# reboot

If you enter only “set”, the system will list all arguments of “set” command and the command format.

The following table lists all the arguments whose value can be modified by “set” command:

Argument	Description	Example
psname	Print server name	set psname PS001
password	Login password	set password 1234
username	Login username	set username admin
wlfunc	Enable or disable the wireless LAN function. The value should be “disabled”, “enabled” or	set wlfunc auto

	"auto"	
wlmode	Wireless LAN mode is Infrastructure. The value should be "inf"	set wlmode infrastructure
ESSID	ESSID of the wireless LAN	set ESSID default
Argument	Description	Example
channel	Channel number used by wireless LAN.	set channel 11
wep	The mode of WEP. The value should be "disable", "wep64" or "wep128"	set wep disable
defkey	Default WEP key number. The value should be 0~3. 0: key 1 1: key 2 2: key 3 3: key 4	set defkey 0
key641	64 bit WEP key 1. The value should be 10 digit Hex value	set key641 0123456789
key642	64 bit WEP key 2. The value should be 10 digit Hex value	set key641 0123456789
key643	64 bit WEP key 3. The value should be 10 digit Hex value	set key641 0123456789
key644	64 bit WEP key 4. The value should be 10 digit Hex value	set key641 0123456789
key1281	128 bit WEP key 1. The value should be 26 digit Hex value	set key1281 0123456789ab cdef0123456789a
key1282	128 bit WEP key 2. The value should be 26 digit Hex value	set key1282 0123456789ab cdef0123456789a
key1283	128 bit WEP key 3.	set key1283 0123456789ab

	The value should be 26 digit Hex value	cdef0123456789a
key1284	128 bit WEP key 4. The value should be 26 digit Hex value	set key1284 0123456789ab cdef0123456789a
ip	IP of the print server	set ip 192.168.2.2
gateway	Default gateway of the print server	set gateway 192.168.2. 254
submask	Subnet mask of the print server	set submask 255.255. 255.0
polling	Polling interval (in second) of the print server for waiting printing jobs on the NetWare server	set polling 3
aq1	Name of the printer queue on the NetWare server	set aq1 PQ1
applezone	The name of AppleTalk zone that this print server joins to	set applezone *

Argument	Description	Example
printertype1	The type of the printer attached to this print server	set printertype1 LaserW riter
SMBDG	The name of the SMB group name that this print server joins to	set SMBDG default
SNMPC	The administrator contact information of this print server for SNMP	set SNMPC sbdjohn@hotm ail.com
SNMPL	The installed location of this print server for SNMP	set SNMPL Room 301
port1	The port name of this print server	set port1 p1
DHCPS	Enable or disable the DHCP server.	set DHCPS disable

	The value should be "disabled" or "enabled".	
DHCP	Enable or disable to get dynamic IP by DHCP. The value should be "disabled" or "enabled".	set DHCP disable
appletalk	Enable or disable AppleTalk printing The value should be "disabled" or "enabled".	set appletalk disable
SMBD	Enable or disable SMB printing The value should be "disabled" or "enabled".	set SMBD enable
SNMP	Enable or disable SNMP management protocol The value should be "disabled" or "enabled".	set SNMP enable
IPX	Enable or disable NetWare Bindery printing The value should be "disabled" or "enabled".	set IPX enable
LPD	Enable or disable LPR printing The value should be "disabled" or "enabled".	set LPD enable
IPP	Enable or disable IPP printing The value should be "disabled" or "enabled".	set IPP enable
RAW	Enable or disable RAW printing The value should be "disabled" or "enabled".	set RAW enable

9.5 Other Commands

9.5.1 ipconfig

“ipconfig” command is used to quickly get the IP settings (IP, subnet mask, default gateway) of the print sever:

Admin# ipconfig
IP_ADDR=192.168.2.2
SUBNET_MASK=255.255.255.0
DEFAULT_GATEWAY=192.168.2.254

9.5.2 reboot

“reboot” command is used to restart the print server:
admin# reboot

9.5.3 exit

“exit” command is used to leave the print server telnet management:

Admin# exit

9.5.4 help

“help” command is used to list all telnet management commands of the print server:

admin# help

set argument value

get argument

ipconfig

reboot

exit

Chapter 10: IPP Printing

10.1 Introduction

IPP (Internet Printing Protocol) Printing provides a convenient way of remote printing service by TCP/IP. The print server can support IPP printing by default. It is needless to do any setting. Any PC that can support IPP printing, for example Windows 2000/XP can directly use the print server by IP. By using the IPP printing, you can share the printer to all the PCs that can access the print server by IP.

10.2 System Setup

10.2.1 Printer Server Side

It is needless to do any setting on the print server side. Make sure the print server has correct IP settings. If you want to share the printers with other Internet users, you have to set a real IP to the print server. You also have to make sure that any gateway; router or firewall does not block IPP protocol if you have these gateway devices installed in your network.

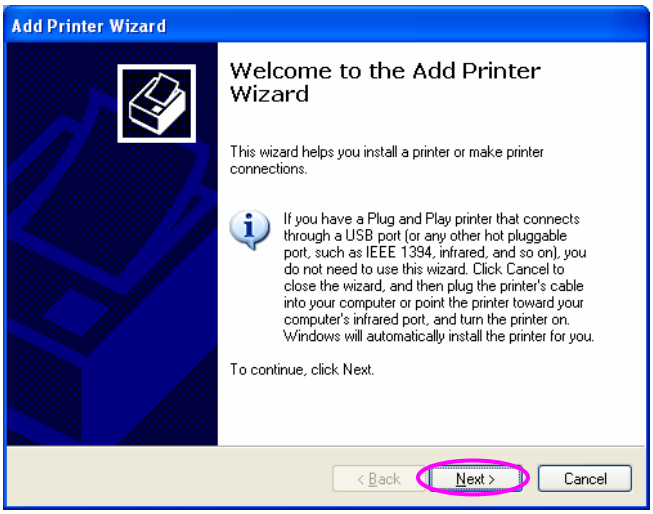
10.2.2 Client Side

You only need to perform Window's standard Add New Printer procedure.

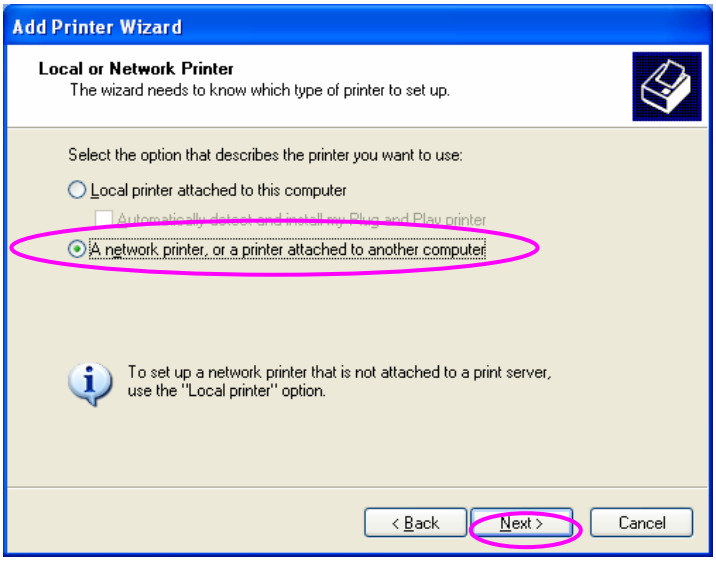
Step 1. Click **Start**, choose "Settings" and select "Printers and Faxes".

Step 2. Click "**Add a Printer**".

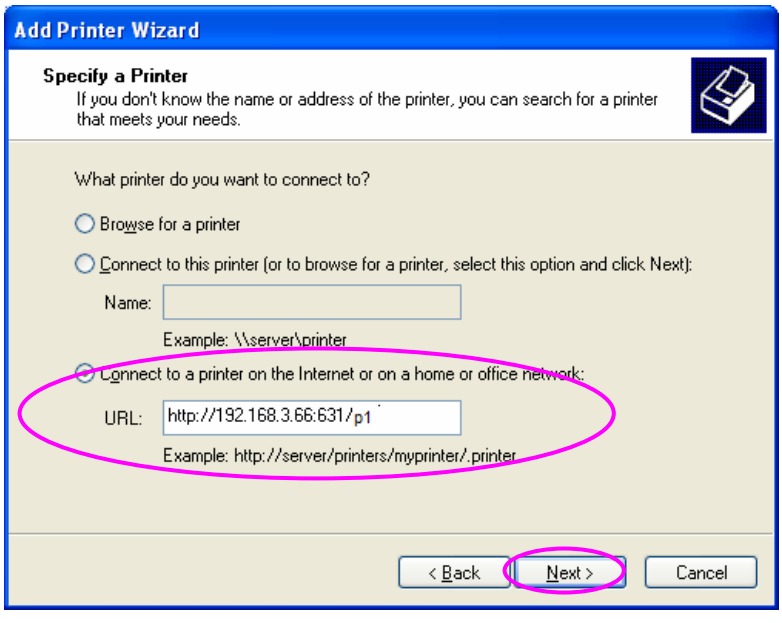
Step 3. The "Add Printer Wizard" is displayed. Click **Next**.


Add Printer Wizard
Welcome to the Add Printer Wizard
This wizard helps you install a printer or make printer connections.
If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.
To continue, click Next.
< Back
Next >
Cancel

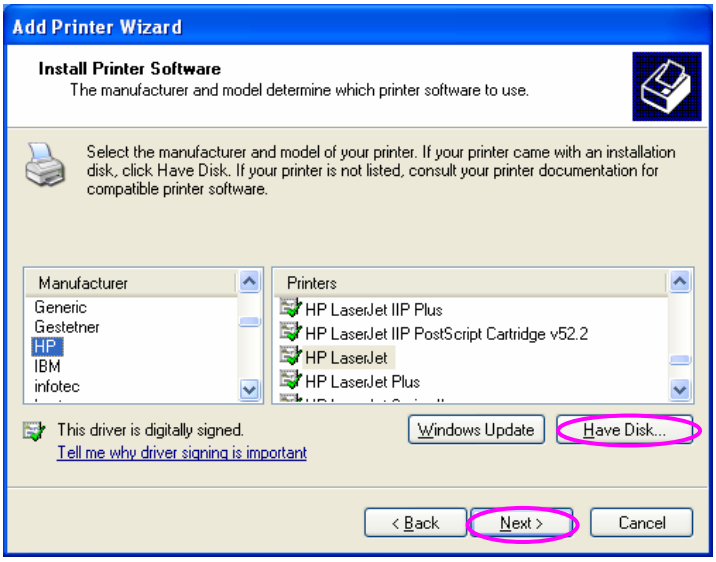
Step 4. Select “A network printer, or a printer attached to another computer”. Click **Next**.


Add Printer Wizard
Local or Network Printer
The wizard needs to know which type of printer to set up.
Select the option that describes the printer you want to use:
Local printer attached to this computer
Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computer
To set up a network printer that is not attached to a print server, use the "Local printer" option.
< Back
Next >
Cancel

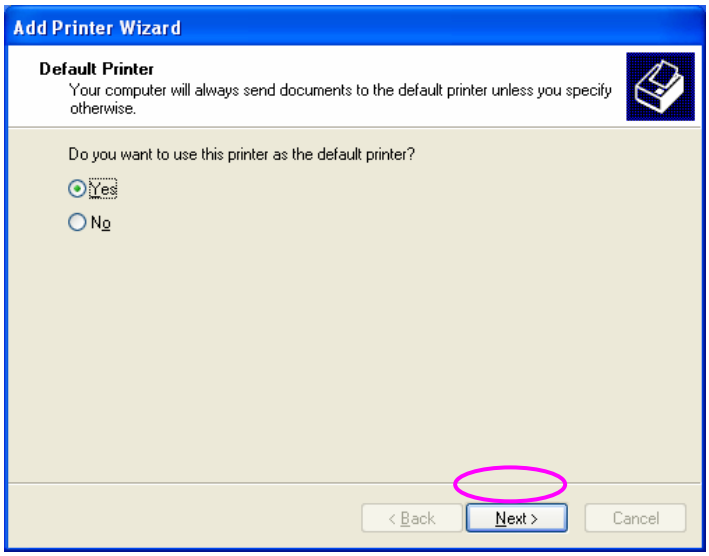
Step 5. Select “Connect to a printer on the Internet or on a home or office network” and enter the URL of the print server. The URL format is http://IP:631/Port Name. The IP should be the print server’s IP. The number 631 is IPP standard port number. Port Name is the port name of print server that your printer is connected to. The default port name is “p1”. One example of the URL is http://192.168.3.66:631/p1. After entering the URL of print server, click **Next**.


Add Printer Wizard
Specify a Printer
If you don't know the name or address of the printer, you can search for a printer that meets your needs.
What printer do you want to connect to?
Browse for a printer
Connect to this printer (or to browse for a printer, select this option and click Next):
Name:
Example: \\server\printer
Connect to a printer on the Internet or on a home or office network:
URL:
http://192.168.3.66:631/p1
Example: http://server/printers/myprinter/.printer
< Back
Next >
Cancel

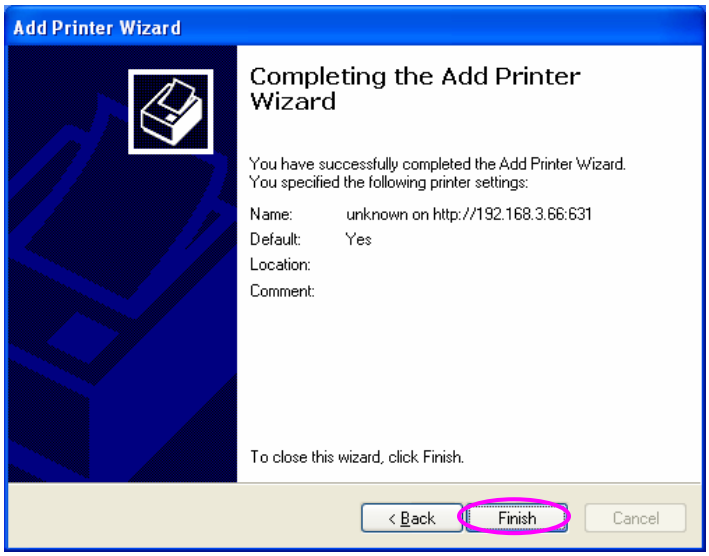
Step 6. Select a suitable printer manufacturer and the printer model and click **Next**. If your printer is not in the list, click “**Have Disk…**” to install the driver of the printer. After installation, the printer model will be added to the list.


Add Printer Wizard
Install Printer Software
The manufacturer and model determine which printer software to use.
Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for compatible printer software.
Manufacturer
Generic
Gestetner
HP
IBM
infotec
Printers
HP LaserJet IIP Plus
HP LaserJet IIP PostScript Cartridge v52.2
HP LaserJet
HP LaserJet Plus
This driver is digitally signed.
Tell me why driver signing is important
Windows Update
Have Disk...
< Back
Next >
Cancel

Step 7. Choose to set the printer to default or not. Click **Next**.


Add Printer Wizard
Default Printer
Your computer will always send documents to the default printer unless you specify otherwise.
Do you want to use this printer as the default printer?
Yes
No
< Back
Next >
Cancel

Step 8. You have added the network printer to the PC successfully. The information of the printer is displayed in the window. Click **Finish**.



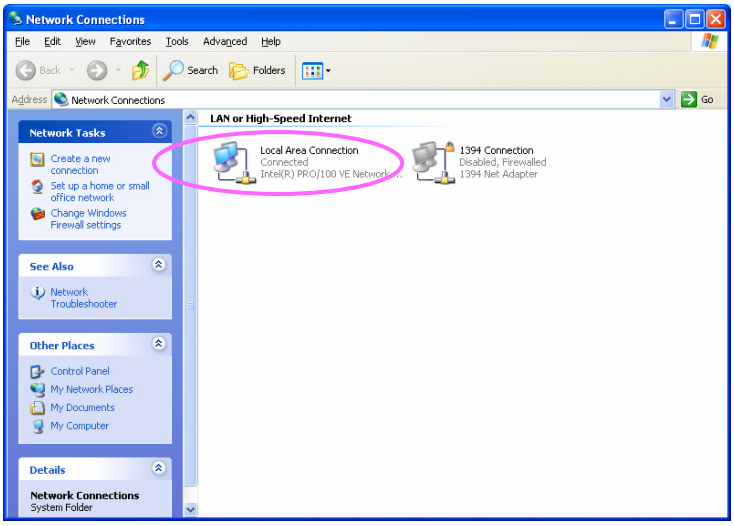
Chapter 11 Windows XP SP2 Setup

In Windows XP SP2, XP SP2's firewall would block the unknown communications. This print server has allowed the communications data to pass through the XP SP2's firewall.

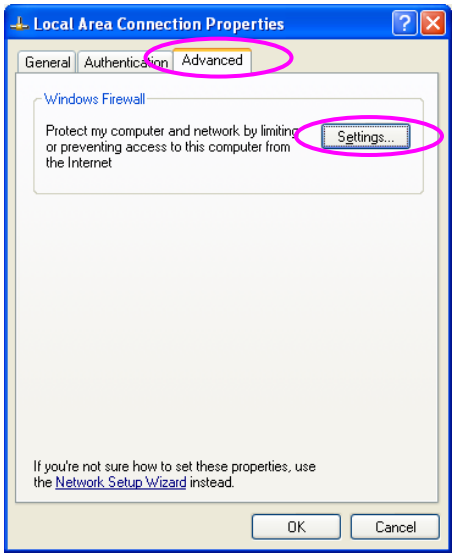
In case that you do not find any print server listed on the "Available Ports" in "Network Ports Quick Setup", please follow the steps below.

Step 1. Click **Start**, choose **Settings** and select "**Network Connections**".

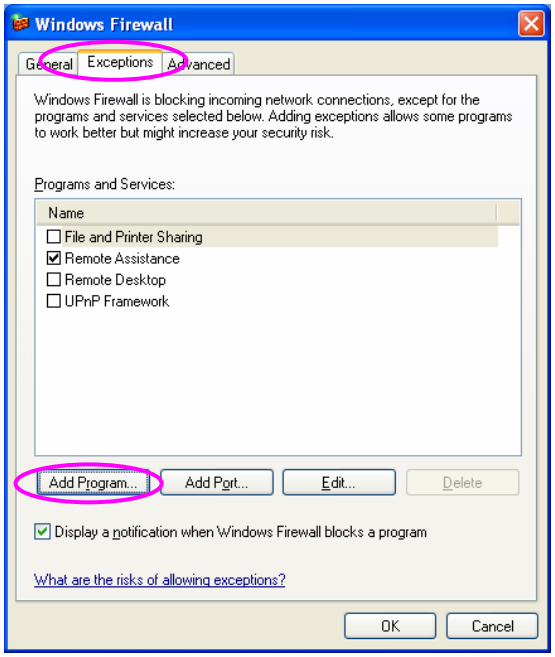
Step 2. Right-click "**Local Area Connection**" and select **Properties**.



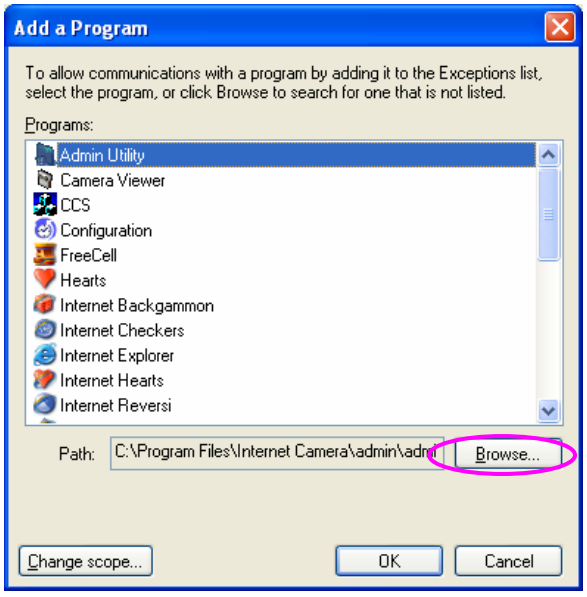
Step 3. Select **Advanced** tab and click "**Settings...**"


Local Area Connection Properties
General
Authentication
Advanced
Windows Firewall
Protect my computer and network by limiting or preventing access to this computer from the Internet
Settings...
If you're not sure how to set these properties, use the Network Setup Wizard instead.
OK
Cancel

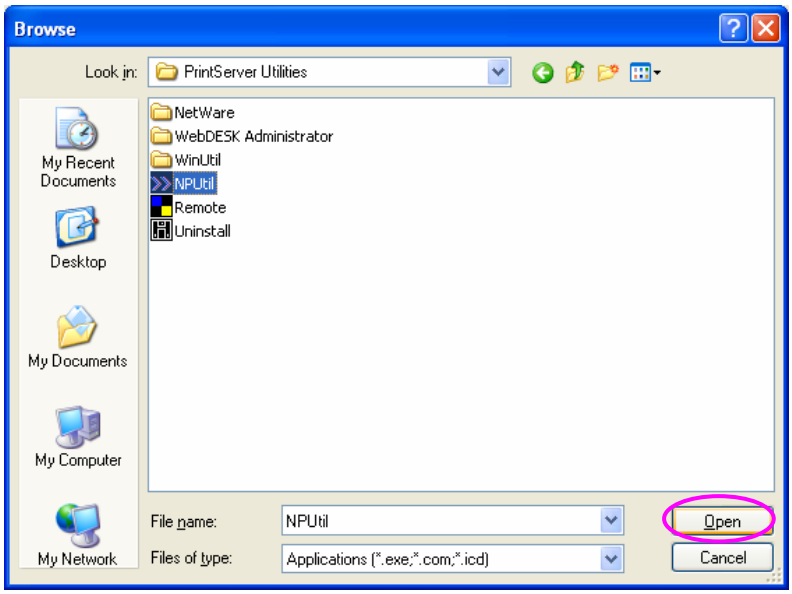
Step 4. Select **Exceptions** tab and click "**Add Program…**"



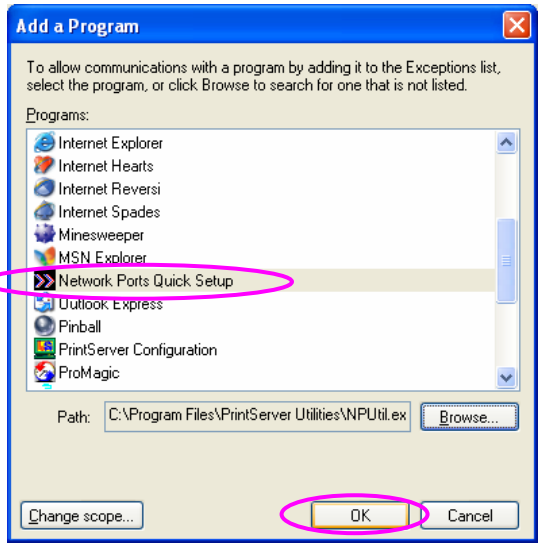
Step 5 Click **Browse** to add a new program.



Step 6. Open the “NPUtil” file from “C:\Program Files\PrintServer Utilities” (where C:\ is the system drive).



Step 7. A new program “Network Ports Quick Setup” is displayed in the list, click **OK**.



Step 8 Click **OK**. You have completed the setting. The Windows XP SP2 will allow the incoming network connections activated by the program.